

POSTER NUMBER	POSTER TITLE	AUTHOR BLOCK
1	MACHINE LEARNING APPROACH TO IDENTIFY RISK FACTORS FOR POST-TRAUMATIC OSTEOARTHRITIS AFTER MULTILIGAMENT KNEE RECONSTRUCTION	C. Jacobs, C. Conley ² , D. Johnson ² , D. Landy ² , A. Stone ² , ¹ Mass Gen. Brigham Sports, Brigham and Women's Hosp., Boston, MA, ² Univ. of Kentucky, Lexington, KY
2	GAIT ALTERATIONS ASSOCIATED WITH WORSENING PHYSICAL FUNCTION OVER 2 YEARS: A MACHINE-LEARNING APPROACH IN THE MULTICENTER OSTEOARTHRITIS (MOST) STUDY	K. L. Bacon, D. T. Felson ¹ , S. R. Jafarzadeh ¹ , V. B. Kolachalama ¹ , J. M. Hausdorff ² , E. Gazit ³ , J. J. Stefanik ⁴ , P. Corrigan ⁵ , N. Segal ⁶ , C. E. Lewis ⁷ , M. C. Nevitt ⁸ , D. Kumar ¹ , ¹ Boston Univ. Chobanian & Avedisian Sch. of Med., Boston, MA, ² Tel Aviv Univ., Tel Aviv, Israel, ³ Tel Aviv Sourasky Med. Ctr., Tel Aviv, Israel, ⁴ Northeastern Univ., Boston, MA, ⁵ Saint Louis Univ., St. Louis, MO, ⁶ Univ. of Kansas Med. Cent, Kansas City, KS, ⁷ Univ. of Alabama at Birmingham, Birmingham, AL, ⁸ Univ. of California, San Francisco, CA
3	THE IMPACT OF SENSOR TECHNOLOGY ON BRACING OUTCOMES FOR KNEE OSTEOARTHRITIS: A RANDOMIZED CONTROLLED CLINICAL TRIAL	R. E. Darcy ^{1,2} , J. R. Couri ² , K. Newkirk ² , R. Neagu ² , V. Darbhe ² , P. Jayabalan ^{1,2} , ¹ Northwestern Feinberg Sch. of Med., Chicago, IL, ² Shirley Ryan AbilityLab, Chicago, IL
4	DEEP LEARNING DRIVEN ESTIMATION OF KNEE KINEMATICS AND KINETICS FROM INERTIAL SENSORS DURING WALKING IN PEOPLE WITH KNEE OSTEOARTHRITIS	B. Cha, V. B. Kolachalama, D. Kumar, Boston Univ., Boston, MA
5	MULTIPLEX CELL NICHE ENGINEERING FOR CHONDROGENIC PHENOTYPE MAINTENANCE OF OSTEOARTHRITIS CHONDROCYTES	H. Leung, N. Huang, A. Chan, C. Yan, B. Chan, The Univ. of Hong Kong, Hong Kong, Hong Kong
6	PREDICTING CHRONIC KNEE PAIN USING AN AUTOMATED MRI-BASED BONE AND CARTILAGE STATISTICAL SHAPE MODEL: DATA FROM THE OSTEOARTHRITIS INITIATIVE	A. A. Gatti, F. Kogan, S. L. Delp, G. E. Gold, A. S. Chaudhari, Stanford Univ., Palo Alto, CA
7	THE USABILITY AND PRELIMINARY EFFECTIVENESS OF AN APP-BASED TRAINING AND EDUCATION PROGRAM (JOIN2MOVE) FOR PEOPLE WITH HIP OR KNEE OSTEOARTHRITIS: A PILOT RANDOMIZED CONTROLLED TRIAL	F. Weber ² , S. Stuhmann ¹ , Y. Blum ¹ , C. Kloek ³ , C. Veenhof ^{2,3} , C. Grüneberg ¹ , ¹ Univ. of Applied Hlth.Sci. Bochum, Bochum, Germany, ² Univ. Med. Ctr. Utrecht, Utrecht, Netherlands, ³ HU Univ. of Applied Sci. Utrecht, Utrecht, Netherlands
8	LEARNING A MODEL OF LUMBAR DISC DEGENERATION PROGRESSION FROM A CROSS-SECTIONAL POPULATION COHORT	T. P. McSweeney, A. Tiulpin, N. Kowlagi, J. Karppinen, S. Saarakkala, Univ. of Oulu, Oulu, Finland
9	SCREENING PLATFORM FOR IDENTIFYING COMPOUNDS THAT PROMOTE CHONDROGENESIS	K. M. Fagerlund, N. Kirillov ¹ , A. Chan ² , J. P. Rissanen ¹ , J. H. Mäki-Jouppila ¹ , ¹ Pharmatest Services, Turku, Finland, ² Percuros BV, Enschede, Netherlands
10	REAL-TIME MUSICAL FEEDBACK FROM PRESSURE-SENSING INSOLES FOR ASYMMETRIC GAIT RETRAINING	L. Cedin, C. B. Knowlton, M. A. Wimmer, Rush Univ., Chicago, IL
11	CARTILAGE-ON-CHIP PLATFORM FOR DRUG SCREENING IN OSTEOARTHRITIS	L. Morshuis, C. A. Paggi, M. Karperien, Univ. of Twente, Enschede, Netherlands
12	DEEP LEARNING APPROACH TO MEASURE CARTILAGE VOLUME FOR USE IN LARGE LONGITUDINAL STUDIES OF KNEE OSTEOARTHRITIS: DATA FROM THE OSTEOARTHRITIS INITIATIVE	J. Duryea, F. Preiswerk ¹ , H. Ragati Haghi ¹ , R. Amesbury ¹ , T. Laffaye ¹ , R. Stein ¹ , A. Mathiessen ² , K. C. Kwoh ³ , ¹ Brigham and Women's Hosp., Boston, MA, ² Diakonhjemmet Hosp., Oslo, Norway, ³ University of Arizona, Tucson, AZ
13	ULTRASENSITIVE BIONANOSENSORS FROM FUNCTIONALIZED NANOFIBERS FOR MUSCULOSKELETAL DISORDERS DIAGNOSIS.	A. Pashchenko ² , L. Varva?ovská ³ , S. Cruciani ² , B. Sopko ¹ , T. Jarošíková ⁴ , M. Maioli ² , E. Amler ^{1,5} , ¹ Charles Univ., Prague, Czech Republic, ² Univ. of Sassari, Sassari, Italy, ³ Czech Technical Univ. in Prague, Prague, Czech Republic, ⁴ Czech Technical Univ. in Prague., Prague, Czech Republic, ⁵ Czech Technical Univ. in Prague, Bustehrad, Czech Republic
14	JOINT MACROPHAGE POPULATIONS PRESENT DIVERSE EXPRESSION PROFILES FOLLOWING KNEE INJURY	D. M. Leale, D. R. Haudenschild, J. H. Yik, UC Davis Hlth., Sacramento, CA

- 15 PATELLA SHAPE ON LATERAL RADIOGRAPH CAN DIAGNOSE PATELLOFEMORAL OSTEOARTHRITIS AND PREDICT KNEE ARTHROPLASTY RISK: A DEEP LEARNING APPROACH S. Lau, L. Chan¹, P. Chan², C. Wen¹, ¹The Hong Kong Polytechnic Univ., Kowloon, Hong Kong, ²The Univ. of Hong Kong, Hong Kong Island, Hong Kong
- 16 TOPOLOGICAL DATA ANALYSIS ON 3-DIMENSIONAL PATELLA SHAPE AS NEW BIOMARKER FOR KNEE ARTHROPLASTY TYPE CLASSIFICATION T. Jiang, L. Chan¹, P. Chan², C. Wen¹, ¹The Hong Kong Polytechnic Univ., Hong Kong SAR, China, ²The Univ. of Hong Kong, Hong Kong SAR, China
- 17 ASSOCIATION OF QUANTITATIVE MEASURES OF EFFUSION-SYNOVITIS USING DEEP-LEARNING WITH SEMI-QUANTITATIVE SCORING SYSTEMS B. Felfeliyan, A. Rakkunedeth², S. Wichuk², J. Jaremko², J. Ronsky³, ¹Univ. of Calgary, calgary, AB, Canada, ²Univ. of Alberta, Edmonton, AB, Canada, ³Univ. of Calgary, Calgary, AB, Canada
- 18 MACHINE LEARNING-BASED TEMPORAL MOTION ANALYSIS TO DETECT SYMPTOMATIC KNEE OSTEOARTHRITIS WITH SIT-TO-STAND VIDEO L. Chan, S. Sze¹, P. Chan², C. Wen¹, ¹Hong Kong Polytechnic Univ., Kowloon, Hong Kong, ²The Univ. of Hong Kong, Pok Fu Lam, Hong Kong
- 19 INFLAMMATORY MARKERS GREATER AT THE TIME OF SURGICAL STABILIZATION FOR THOSE WITH MULTIPLE PREVIOUS SHOULDER DISLOCATIONS C. Jacobs, D. Wood², N. Lemaster², C. Sneed², L. Enterline², S. Mair², ¹Mass Gen. Brigham Sports, Brigham and Women's Hosp., Boston, MA, ²Univ. of Kentucky, Lexington, KY
- 20 DIAGNOSTIC ACCURACY OF HISTORY TAKING, PHYSICAL EXAMINATION, AND AUXILIARY EXAMINATION FOR THUMB OSTEOARTHRITIS Y. He, P. Krastman¹, G. Kraan², N. M. Mathijssen², S. M. Bierma-Zeinstra¹, J. Runhaar¹, ¹Erasmus MC Univ. Med. Ctr. Rotterdam, Rotterdam, Netherlands, ²Reinier de Graaf Groep, Delft, Netherlands
- 21 INTRA-ARTICULAR LIPOPOLYSACCHARIDES ARE NOT DRIVING THE PROGRESSION OF OSTEOARTHRITIS K. Bevc, K. Eklund², G. Barreto², M. Zenobi Wong¹, ¹ETH Zurich, Zurich, Switzerland, ²Univ. of Helsinki, Helsinki, Finland
- 22 HOW IS ANKLE OSTEOARTHRITIS CURRENTLY MANAGED BY UK-BASED PHYSIOTHERAPISTS AND PODIATRISTS? AN ONLINE SURVEY M. J. Callaghan, J. P. Gala¹, E. Roddy², ¹Manchester Metropolitan Univ., Manchester, United Kingdom, ²Keele Univ., Keele, United Kingdom
- 23 DIETARY PRACTICES AND BELIEFS OF PATIENTS WITH HAND OSTEOARTHRITIS AND RELATIONSHIP WITH SYMPTOMS: RESULTS OF THE CROSS SECTIONAL RHEUMADIET STUDY D. Renard, S. Tuffet¹, E. Maheu¹, C. Jamakorzian², S. Czernichow³, C. Carette³, A. Rousseau¹, F. Berenbaum¹, C. Beauvais¹, J. Sellam¹, ¹Hôpital Saint Antoine, Paris, France, ²Hôpital Bégin, Saint Mandé, France, ³Hôpital Européen Georges Pompidou, Paris, France
- 24 EFFICACY OF TUMOR NECROSIS FACTOR INHIBITORS IN HAND OSTEOARTHRITIS: A SYSTEMATIC REVIEW AND META-ANALYSIS OF RANDOMIZED CONTROLLED TRIALS M. Estee, F. Cicutini, M. Page, A. Wluka, Y. Wang, Monash Univ., Melbourne, Australia
- 25 ASSOCIATIONS BETWEEN PRE-OPERATIVE CLINICAL DATA, RADIOGRAPHIC OSTEOARTHRITIS AND INTERLEUKIN-6 IN DOGS WITH NATURALLY OCCURRING CRANIAL CRUCIATE LIGAMENT DISEASE J. Alves, M. Owen², E. Schnabl-Feichter³, D. Mason¹, ¹Cardiff Univ., Cardiff, United Kingdom, ²Ossicle, Somerset, United Kingdom, ³Vet. Univ. Vienna, Vienna, Austria
- 26 QUANTITATIVE MEASUREMENT OF MULTIPLE MRI-BASED STRUCTURAL MEASURES OF KNEE OSTEOARTHRITIS - ANALYSIS OF THE OA BIOMARKERS CONSORTIUM FNIH STUDY COHORT J. Duryea, L. Lo, M. Sury, S. M. Bahouth, M. Yin, L. F. Schaefer, J. E. Collins, S. E. Smith, Brigham and Women's Hosp., Boston, MA
- 27 THE INCREASE OF LOAD-INDUCED SERUM CARTILAGE OLIGOMERIC MATRIX PROTEIN CONCENTRATION CORRELATES WITH T2 RELAXATION TIME IN PARTICIPANTS WITH ANTERIOR CRUCIATE LIGAMENT INJURY S. Herger², A-M. Liphardt³, A. Wisser^{4,5}, F. Eckstein^{4,5}, D. Harder¹, C. Nüesch^{1,2}, C. Egloff¹, A. Mündermann^{1,2}, ¹Univ. Hosp. Basel, Basel, Switzerland, ²Univ. of Basel, Basel, Switzerland, ³FAU Erlangen-Nürnberg & Univ.sklinikum Erlangen, Erlangen, Germany, ⁴Chondrometrics GmbH, Freilassing, Germany, ⁵Paracelsus Med. Univ., Salzburg, Austria

- 28 BILE ACID PROFILE IS ASSOCIATED TO SYNOVITIS IN KNEE OSTEOARTHRITIS R. Coras1, J. D. Murillo Saich, M. K. Hose2, A. Quan2, H. Mannocho-Russo3, E. Gentry3, P. Dorrestein3, N. E. Lane4, M. Guma1,5, 1Univ. of California San Diego, La Jolla, CA, 2VA San Diego Hlth.care System, La Jolla, CA, 3Univ. of California San Diego, Collaborative Mass Spectrometry Innovation Ctr., La Jolla, CA, 4Univ. of California Davis, Sacramento, CA, 5VA San Diego Hlth.care System, La Jolla, CA, United States, San Diego, CA
- 29 RADIOGRAPHIC OSTEOARTHRITIS PROGRESSION CAN BE PREDICTED VIA PYROSEQUENCING ANALYSIS OF BASELINE PERIPHERAL BLOOD C. Dunn, C. Velasco2, L. Schlupp1, E. Holmlund1, V. Izda3, L. Arbeeva4, Y. Golightly4, A. Nelson4, M. Jeffries1, 1Oklahoma Med. Res. Fndn., Oklahoma City, OK, 2Univ. of Oklahoma Hlth.Sci. Ctr., Oklahoma City, OK, 3Icahn Sch. of Med. at Mount Sinai, New York, NY, 4UNC Sch. of Med., Chapel Hill, NC
- 30 ASSOCIATION BETWEEN KNEE CARTILAGE THICKNESS AND CONCENTRATIONS OF BIOMARKERS ASSOCIATED WITH MATRIX METABOLISM AND JOINT SPECIFIC INFLAMMATION AT 2 AND 5 YEARS AFTER ANTERIOR CRUCIATE LIGAMENT INJURY S. Larsson, F. Eckstein2,3, W. Wirth2,3, S. Lohmander1, A. Struglics1, 1Lund Univ., Clinical Sci. Lund, Orthopedics, Lund, Sweden, 2Paracelsus Med. Univ. Salzburg & Nuremberg, Salzburg, Austria, 3Chondrometrics GmbH, Freilassing, Germany
- 31 DETERMINATION OF URINARY AND SYNOVIAL FLUID C2C LEVELS IN TOTAL KNEE ARTHROPLASTY PATIENTS A. Sandhu, O. Espin-Garcia1, J. S. Rockel1, S. Lively1, K. Perry1, N. N. Mohamed1,2, Y. Raja Rampersaud1,2, A. Perruccio1,2, R. Poole3, R. Gandhi1,2, M. Kapoor1, 1Schroeder Arthritis Inst., Univ. Hlth.Network, Toronto, ON, Canada, 2Univ. Of Toronto, Toronto, ON, Canada, 3Robin Poole Sci. Inc, McGill Univ., Montreal, QC, Canada
- 32 CIRCULATING MIRNA SIGNATURE AFTER ANTERIOR CRUCIATE LIGAMENT RECONSTRUCTION SURGERY A. Sandhu, K. Hueniken1, S. Lively1, J. S. Rockel1, A. Sanjevic2, K. Perry1, S. Docter2, T. Wagner2, D. Ogilvie-Harris2, T. Dwyer2, J. Chahal2, M. Kapoor1, 1Schroeder Arthritis Inst., Univ. Hlth.Network, Toronto, ON, Canada, 2Women's Coll. Hosp., Toronto, ON, Canada
- 33 DEVELOPMENT OF A PROGNOSTIC MODEL FOR KNEE OSTEOARTHRITIS: PREDICTION OF PRE-RADIOGRAPHIC AND RADIOGRAPHIC DISEASE. AN OAI AND PROCOAC STUDY. R. Paz-González, V. Balboa, L. Lourido, V. Calamia, P. Fernández-Puente, P. Quaranta, N. Oreiro, C. Ruiz-Romero, F. Blanco, INIBIC - CHU A Coruña, A Coruña, Spain
- 34 CHEMOKINE RECEPTOR CXCR7 CONTRIBUTE TO THE INFLAMMATORY REACTION OF ARTICULAR CHONDROCYTE J. Park, H-J. Cho2, H-R. Park2, J. Jang2, E-j. Lee2, S. Lee1, S. Lee3, H. Moon3, E. Nam4, G. Kim5, 1Dong-A Univ. Hosp., Busan, Korea, Republic of, 2Fatima Res. Inst., Daegu Fatima Hosp., Daegu, Korea, Republic of, 3Daegu-Gyeongbuk Med. Innovation Fndn., Daegu, Korea, Republic of, 4Kyungpook Natl. Univ. Chilgok Hosp., Daegu, Korea, Republic of, 5Daegu Fatima Hosp., Busan, Korea, Republic of
- 35 NEW BIOMARKERS IN HAND OSTEOARTHRITIS: THE MICRO-RNAS M. Auroux, M. Millet2, B. Merle2, E. Fontanges1, F. Duvert1, E. Gineyts2, J-C. Rousseau2, O. Borel2, A. Mercier1, E. Lespessailles3, R. Chapurlat1, 1Hospices Civils de Lyon, LYON, France, 2INSERM U1033, LYON, France, 3Ctr. Hosp.ier d'Orleans, ORLEANS, France
- 36 PROTEIN PROFILING OF PLASMA EXTRACELLULAR VESICLES FROM OSTEOARTHRITIC PATIENTS POINTS TO A PROTHROMBOTIC STATE AND A NEUROPATHIC COMPONENT IN THIS DISEASE O. J. Arntz, Jr.1, M. H. van den Bosch, R. M. Thurlings1, M. Vermeulen2, P. M. van der Kraan1, F. A. Van de Loo1, 1Radboudumc, Nijmegen, Netherlands, 2Radboud Univ. Nijmegen, Nijmegen, Netherlands
- 37 MTDNA D-LOOP VARIANT M.16519C MODIFIES THE EXPRESSION PATTERN OF TRANSMITOCHONDRIAL CYBRIDS CONDITIONING THE RISK OF DEVELOPING THE RAPIDLY PROGRESSIVE KNEE OSTEOARTHRITIS. POTENTIAL ROLE OF INFLAMMATION. A. Durán-Sotuela, M. Fernández-Moreno, T. Hermida-Gómez, L. Lourido-Salas, J. Fernández-Tajes, S. Relafío, J. Vázquez-García, N. Oreiro, M. C. de Andrés, F. J. Blanco, I. Rego-Pérez, Servicio de Reumatología. Inst. de Investigación Biomédica de A Coruña (INIBIC). Complejo Hosp.ario Univ.rio de A Coruña (CHUAC), Sergas. Univ.e da Coruña (UDC)., A Coruña, Spain
- 38 CARTILAGE FORMATION TRAJECTORIES FROM NEWBORNS TO ADULT LIFE REVEAL A LOW REPAIR ENDOTYPE OF OA PATIENTS, AS QUANTIFIED BY TYPE II COLLAGEN FORMATION Y. He, D. Sinkeviciute, Y. Luo, M. Karsdal, A-C. Bay-Jensen, Nordic BioSci., Herlev, Denmark

39	RELEVANCE OF BIOMARKERS IN SERUM VS SYNOVIAL FLUID IN PATIENTS WITH KNEE OSTEOARTHRITIS	S. Kalogera ² , M. Jansen ³ , A-C. Bay Jensen ¹ , P. Frederiksen ¹ , M. Karsdal ¹ , F. Lafeber ^{3,4} , S. Mastbergen ^{3,4} , C. Thudium ¹ , ¹ Nordic BioSci., Herlev, Denmark, ² Dept. of Drug Design and Pharmacology, Copenhagen Univ., Copenhagen, Denmark, ³ Rheumatology and Clinical Immunology, Utrecht, Netherlands, ⁴ Regenerative Med. Ctr., Utrecht, Netherlands
40	NOVEL BIOMARKERS OF CARTILAGE METABOLISM ARE MECHANOSENSITIVE IN RESPONSE TO 30 MINUTES WALKING IN ACPA-POSITIVE INDIVIDUALS WITHOUT SIGNS OF ARTHRITIS AND RHEUMATOID ARTHRITIS PATIENTS	A-M. Liphardt, E-T. Godonou ¹ , L. Bleckwedel-Rolack ¹ , J. Hühne ¹ , V. Nees ¹ , A. Hueber ² , J. Rech ¹ , A. Kleyer ¹ , M. A. Karsdal ³ , G. Schett ¹ , A-C. Bay-Jensen ³ , ¹ Friedrich-Alexander-Univ. (FAU) Erlangen-Nürnberg & Univ.sklinikum Erlangen, Erlangen, Germany, ² Klinikum Nürnberg & Paracelsus Med. Univ., Erlangen, Germany, ³ Nordic BioSci., Herlev, Denmark
41	THE AGED BEAGLE DOG AS A NATURAL MODEL OF OSTEOARTHRITIS	C. de Rivera, J. Prenderville ² , R. Winters ² , S. Thevarkunnel ¹ , J. A. Araujo ¹ , ¹ Transpharmation, Fergus, ON, Canada, ² Transpharmation, Dublin, Ireland
42	GAIT BIOMECHANICS AND PHYSICAL ACTIVITY AS PREDICTORS OF CARTILAGE DEGRADATION AFTER ANTERIOR CRUCIATE LIGAMENT RECONSTRUCTION	M. McKee, D. Werner, Y. Golightly, E. Wellsandt, Univ. of Nebraska Med. Ctr., Omaha, NE
43	INFLAMMATION PROFILE IN SYNOVIAL FLUID ASSESSED BY PROXIMITY EXTENSION ASSAY EARLY AFTER KNEE INJURY	A. Struglics, S. Larsson, S. Lohmander, P. Swärđ, Lund Univ., Faculty of Med., Dept. of Clinical Sci. Lund, Orthopaedics, Lund, Sweden
44	BIOMARKER DISCOVERY USING SYNOVIAL FLUID PROTEOMICS FOR EQUINE OSTEOARTHRITIS	H. Reesink, E. Secor, S. Womack, J. Schayes, Cornell Univ., Ithaca, NY
45	IDENTIFICATION OF CIRCULATING MICRO RNAS TO PREDICT OSTEOARTHRITIS MOLECULAR ENDOTYPES BY WHOLE TRANSCRIPTOMIC DATA INTEGRATION AND MATCHING DRUGGABLE TARGETS	M. Tuerlings, I. Boone, E. Suchiman, N. Lakenberg, R. van der Wal, R. Nelissen, Y. Ramos, R. Coutinho de Almeida, I. Meulenbelt, Leiden Univ. Med. Ctr., Leiden, Netherlands
46	QUANTIFICATION OF GLYCOSAMINOGLYCANS IN KNEE SYNOVIAL FLUID FROM DIFFERENT PATIENT GROUPS AND KNEE-HEALTHY SUBJECTS USING HIGH PERFORMANCE LIQUID CHROMATOGRAPHY	E. Andersson, E. Tykesson, A. Struglics, Lund Univ., Lund, Sweden
47	BASELINE LEVELS OF THE SOLUBLE BIOMARKERS PRO-C2 AND CRPM ARE ASSOCIATED WITH PAIN TRAJECTORIES IN KNEE OSTEOARTHRITIS	A-C. Bay-Jensen, C. Thudium, D. Sinkeviciute, Y. He, M. Karsdal, Nordic BioSci., Herlev, Denmark
48	EXPLORING BILATERAL THIGH NORMALIZED-LEAN-MUSCLE AND FAT VOLUME ASSOCIATIONS WITH KNEE CARTILAGE THICKNESS AND FUNCTIONAL PARAMETERS IN RADIOGRAPHIC HIP OA PATIENTS	R. Bhattacharjee, K. E. Roach, Z. Akkaya, P. Giesler, R. Souza, V. Pedoia, S. Majumdar, Univ. of California, San Francisco (UCSF), San Francisco, CA
49	SERUM AND SYNOVIAL FLUID PANEL OF BIOMARKERS IN DETECTION OF EARLY POST-TRAUMATIC OSTEOARTHRITIS IN A CLINICALLY INDUCED EQUINE MODEL	S. Malek ¹ , F. Marini ² , S. C. Buono ² , T. N. Trumble ³ , ¹ Purdue Univ. Coll. of Vet. Med., West Lafayette, IN, ² Univ. of Rome La Sapienza, Rome, Italy, ³ Univ. of Minnesota, St. Paul, MN
50	SAFETY AND EFFICACY OF GENICULAR ARTERY EMBOLIZATION FOR TREATMENT OF KNEE OSTEOARTHRITIS: INTERIM ANALYSIS OF A PROSPECTIVE PILOT TRIAL INCLUDING EFFECT ON SERUM OSTEOARTHRITIS-ASSOCIATED BIOMARKERS	
t"		
51	CALCIUM CRYSTAL IN THE SYNOVIAL FLUID OF PATIENTS WITH FEMOROACETABULAR IMPINGEMENT: IMPACT ON CLINICAL OUTCOMES	E. Tassinari ¹ , F. Mariotti ¹ , F. Castagnini ¹ , M. Favero ² , F. Oliviero ² , A. Evangelista ¹ , R. Ramonda ² , F. Traina ¹ , B. Grigolo ¹ , E. Olivotto, ¹ IRCCS Istituti Ortopedici Rizzoli, Bologna, Italy, ² Univ.-Hosp. of Padova, Padova, Italy

- 52 CIRCULATING LEVELS OF MIR-140 AS BIOMARKER OF DECREASED RISK OF INCIDENCE KNEE OSTEOARTHRITIS: DATA FROM THE OSTEOARTHRITIS INITIATIVE M. Blanco-Blanco, I. Rego-Pérez, V. Balboa-Barreiro, C. Núñez-Carro, F. J. Blanco, M. C. de Andrés, BioMed Res. Inst. of A Coruña-INIBIC, A Coruña, Spain
- 53 ELASTIC-NET PENALIZED METHYLATION-BASED CLASSIFICATION OF OSTEOARTHRITIS IN THE MULTICENTER OSTEOARTHRITIS STUDY P. C. Okoro¹, I. K. Haugen², J. A. Lynch³, M. C. Nevitt³, C. E. Lewis⁴, J. Torner⁵, D. T. Felson⁶, M. S. Yau, ¹Hebrew SeniorLife, Boston, MA, ²Diakonhjemmet Hosp., Oslo, Norway, ³Univ. of California San Francisco, San Francisco, CA, ⁴Univ. of Alabama at Birmingham, Birmingham, AL, ⁵Univ. of Iowa, Iowa City, IA, ⁶Boston Univ., Boston, MA
- 54 AN EXPLORATORY, PHASE 2 CLINICAL TRIAL IN KNEE OSTEOARTHRITIS SUBJECTS SUGGESTS THERAPEUTIC EFFECTS OF PENTOSAN POLYSULFATE SODIUM ON SYNOVIAL FLUID BIOMARKERS OF PAIN, INFLAMMATION AND CHONDROPROTECTION M. Ahuja, M. Duiker², C. Gravance¹, D. Navuru², R. Krishnan², D. Skerrett¹, O. Cumming³, P. Bloom⁴, ¹Paradigm Biopharmaceuticals, New York, NY, ²Paradigm Biopharmaceuticals, Melbourne, Australia, ³Novatrials, Newcastle, Australia, ⁴Sportsmed Biologic, Melbourne, Australia
- 55 JOINT COORDINATION PATTERNS ARE ASSOCIATED WITH JOINT LOADING IN PERSONS WITH KNEE OSTEOARTHRITIS C-H. Huang, K. James¹, C. Lanois¹, P. Corrigan², J. Stefanik¹, ¹Northeastern Univ., Boston, MA, ²Saint Louis Univ., Saint Louis, MO
- 56 DOES KNEE FLEXION MOMENT DIFFER BETWEEN FEMALES AND MALES WITH PATELLOFEMORAL OSTEOARTHRITIS, AND IS IT ASSOCIATED WITH PATELLOFEMORAL JOINT-RELATED SYMPTOMS? H. F. Hart, T. Birmingham¹, P. Sritharan², C. Primeau¹, M. King², L. Fischer¹, ¹Western Univ., London, ON, Canada, ²La Trobe Univ., Bundoora, Australia
- 57 TECHNOLOGY-ENABLED GAIT MONITORING AND MODIFICATION FOR MANAGING KNEE OSTEOARTHRITIS. A RANDOMIZED PILOT TRIAL J. M. Charlton, N. Krowchuk, J. Eng, L. Li, M. Hunt, Univ. of British Columbia, Vancouver, BC, Canada
- 58 THE INFLUENCE OF QUADRICEPS PERFORMANCE AND RUNNING BIOMECHANICS ON LONGITUDINAL CHANGES IN DISTAL FEMUR BONE MINERAL DENSITY AFTER ANTERIOR CRUCIATE LIGAMENT RECONSTRUCTION IN DIVISION I COLLEGIATE ATHLETES K. Knurr, J. Lyon, C. Haack, S. Kliethermes, D. Cobian, M. Stiffler-Joachim, N. Binkley, T. Scerpella, B. Heiderscheit, Univ. of Wisconsin - Madison, Madison, WI
- 59 THE RELATIONSHIP BETWEEN CARTILAGE CONTACT PRESSURES DURING WALKING AND MRI MEASURES OF DEGENERATION IN PATIENTS WITH KNEE OSTEOARTHRITIS C. R. Smith, A. Carcia, A. Bradshaw, B. Bernarding, M. J. Philippon, J. Huard, L. Watkins, S. Tashman, Steadman Philippon Res. Inst., Vail, CO
- 60 FUNCTIONAL IMPROVEMENTS IN KNEE KINEMATICS DURING WALKING GAIT OVER SIX MONTHS FOLLOWING TREATMENT WITH XT-150: POOLED RESULTS FROM TWO CLINICAL TRIALS D. Thewlis, S. Collins², M. Huston², S. Millar¹, M. Rickman³, ¹Univ. of Adelaide, Adelaide, Australia, ²Xalud Therapeutics, Inc., New York, NY, ³Royal Adelaide Hosp., Adelaide, Australia
- 61 BIOMECHANICAL THRESHOLD VALUES FOR IDENTIFYING POSTTRAUMATIC OSTEOARTHRITIS-RELATED SYMPTOMS SIX MONTHS FOLLOWING ANTERIOR CRUCIATE LIGAMENT RECONSTRUCTION A. N. Buck, C. M. Lisee, E. S. Bjornsen, T. A. Schwartz, J. T. Spang, J. R. Franz, J. T. Blackburn, B. G. Pietrosimone, Univ. of North Carolina at Chapel Hill, Chapel Hill, NC
- 62 SEX DIFFERENCES IN HINDLIMB FUNCTION AND PAIN RESPONSES DURING THE DEVELOPMENT OF SPONTANEOUS KNEE OSTEOARTHRITIS IN MICE J. St Amant, J. Michaud, D. Hinds, A. L. Clark, Univ. of Guelph, Guelph, ON, Canada
- 63 ASSOCIATION OF GAIT ASYMMETRY WITH RISK OF A CONTRALATERAL TOTAL KNEE ARTHROPLASTY IN PEOPLE WITH UNILATERAL TOTAL KNEE ARTHROPLASTY: THE MULTICENTER OSTEOARTHRITIS STUDY J. Kim, D. T. Felson¹, M. LaValley², N. A. Segal³, C. E. Lewis⁴, M. C. Nevitt⁵, D. Kumar⁶, ¹Boston Univ. Sch. of Med., Boston, MA, ²Boston Univ. Sch. of Publ. Hlth., Boston, MA, ³Univ. of Kansas, Lawrence, KS, ⁴Univ. of Alabama at Birmingham, Birmingham, AL, ⁵Univ. of California, San Francisco, San Francisco, CA, ⁶Boston Univ., Boston, MA
- 64 EFFECTS OF REAL-TIME BIOFEEDBACK USING INSTRUMENTED INSOLES ON RECOVERY AFTER TOTAL KNEE ARTHROPLASTY: A PILOT STUDY M. Bade, V. Cheu², J. Zeni³, C. Christiansen¹, J. Stevens-Lapsley¹, ¹Univ. of Colorado Anschutz Med. Campus, Aurora, CO, ²Univ. of California, San Francisco, CA, ³Rutgers, Newark, NJ

65	A LOWER LIMB EXERCISE PROGRAMME INCREASES ACTIVITY PROFILES IN INDIVIDUALS WITH MEDIAL KNEE OSTEOARTHRITIS.	J. Molyneux, A. Clarke-Cornwell, L. Herrington, R. K. Jones, Univ. of Salford, Salford, United Kingdom
66	PREOPERATIVE KINESIOPHOBIA NOT PAIN IS ASSOCIATED WITH ABERRANT GAIT BIOMECHANICS FOLLOWING ANTERIOR CRUCIATE LIGAMENT RECONSTRUCTION	C. Lisee, S. Baez, E. Bjornsen, C. Büttner, A. Buck, T. Blackburn, J. Hu, L. Thoma, J. Spang, R. A. Creighton, G. Kamath, B. Pietrosimone, Univ. of North Carolina at Chapel Hill, Chapel Hill, NC
67	RELATION OF WALKING CADENCE TO CHANGES IN KNEE PAIN: THE MULTICENTER OSTEOARTHRITIS STUDY	K. James, T. Neogi ² , D. Felson ² , P. Corrigan ³ , C. Lewis ² , I. Davis ⁴ , K. Bacon ² , J. Torner ⁵ , C. Lewis ⁶ , M. Nevitt ⁷ , J. Stefanik ¹ , ¹ Northeastern Univ., Boston, MA, ² Boston Univ., Boston, MA, ³ Saint Louis Univ., St. Louis, MO, ⁴ Univ. of South Florida, Tampa, FL, ⁵ Univ. of Iowa, Iowa City, IA, ⁶ Univ. of Alabama Birmingham, Birmingham, AL, ⁷ Univ. of California San Francisco, San Francisco, CA
68	OUT OF LAB STAIR MECHANICS DIFFER BETWEEN ADULTS WITH AND WITHOUT KNEE OSTEOARTHRITIS	J. Mihy, M. Wagatsuma, J. Mlecko, J. Hafer, Univ. of Delaware, Newark, DE
69	HIGHER KNEE LOADING CORRELATES TO GREATER CARTILAGE DEGENERATION 2 YEARS AFTER ANTERIOR CRUCIATE LIGAMENT RECONSTRUCTION	A. A. Williams ² , J. He ^{1,2} , S. Bansal ^{1,2} , A. L. Wadsworth ^{1,2} , B. A. Hargreaves ¹ , C. R. Chu ^{1,2} , ¹ Stanford Univ., Stanford, CA, ² Palo Alto Veterans Hosp., Palo Alto, CA
70	GAIT BIOMECHANICS DIFFER EARLY FOLLOWING ANTERIOR CRUCIATE RECONSTRUCTION BETWEEN INDIVIDUALS ENGAGING IN DIFFERENT DAILY STEP BEHAVIORS	C. Büttner ² , C. Lisee ¹ , E. Bjornsen ¹ , A. Buck ¹ , J. Hu ¹ , J. Mo ¹ , L. Thoma ¹ , J. Spang ¹ , T. Blackburn ¹ , B. Pietrosimone ¹ , ¹ Univ. of North Carolina at Chapel Hill, Chapel Hill, NC, ² Chemnitz Univ. of Technology, Chemnitz, Germany
71	STRUCTURAL FOOT CHARACTERISTICS IN PEOPLE WITH MIDFOOT OSTEOARTHRITIS	M. J. Lithgow, A. K. Buldt ¹ , S. E. Munteanu ¹ , M. M. Marshall ² , M. J. Thomas ² , G. Peat ² , E. Roddy ² , H. B. Menz ¹ , ¹ La Trobe Univ., Melbourne, Australia, ² Keele Univ., Staffordshire, United Kingdom
72	ASSOCIATION BETWEEN STANDING AND WALKING BIOMECHANICAL PARAMETERS IN KNEE OSTEOARTHRITIS PATIENTS USING STATISTICAL PARAMETRIC MAPPING	Y. Hu ¹ , P. Teng ¹ , T-L. Wu ¹ , R. A. Clark ² , Y-H. Pua ³ , J. Yong ¹ , A. Alhossary ¹ , L. Lim ¹ , W. Ang ¹ , B. Tan ⁴ , ¹ Nanyang Technological Univ., Singapore, Singapore, ² Univ. of the Sunshine Coast, Sunshine Coast, Australia, ³ Singapore Gen. Hosp., Singapore, Singapore, ⁴ Woodlands Hlth., Singapore, Singapore
73	CAN GAIT PATTERNS IN KNEE OSTEOARTHRITIS PATIENTS BE EXPLAINED OR PREDICTED BY JOINT STRUCTURE?	M. P. Jansen, D. Hodgins ² , S. C. Mastbergen ¹ , M. Kloppenburg ³ , F. J. Blanco ⁴ , I. K. Haugen ⁵ , F. Berenbaum ⁶ , F. P. Lafeber ¹ , F. W. Roemer ⁷ , W. Wirth ⁸ , ¹ Univ. Med. Ctr. Utrecht, Utrecht, Netherlands, ² Dynamic Metrics Limited, Codicote, United Kingdom, ³ Leiden Univ. Med. Ctr., Leiden, Netherlands, ⁴ INIBIC – Complejo Hosp.ario Univ.rio de A Coruña, A Coruña, Spain, ⁵ Diakonhjemmet Hosp., Oslo, Norway, ⁶ AP-HP Saint-Antoine Hosp., Paris, France, ⁷ Boston Univ. Sch. of Med., Boston, MA, ⁸ Paracelsus Med. Univ. Salzburg & Nuremberg, Salzburg, Austria
74	SINGLE OR COMBINED GAIT PARAMETERS? TARGETING A SPECIFIC DUAL KINETIC CHANGE THROUGH GAIT RETRAINING IN PEOPLE WITH MEDIAL KNEE OSTEOARTHRITIS	L. C. Pereira ² , B. Ulrich ² , J. Runhaar ¹ , S. Bierma-Zeinstra ¹ , B. M. Jolles ² , J. Favre ² , ¹ Erasmus MC Univ. Med. Ctr., Rotterdam, Netherlands, ² Lausanne Univ. Hosp., Lausanne, Switzerland
75	A NEW BEHAVIOURAL INTERVENTION FOR KNEE OSTEOARTHRITIS	S. J. Preece, N. Brookes ¹ , N. E. Walsh ² , D. Ghio ³ , ¹ Univ. of Salford, Manchester, United Kingdom, ² Univ. of the West of England, Bristol, United Kingdom, ³ Univ. of Manchester, Manchester, United Kingdom
76	KNEE MOMENTS AND THEIR RELATIONSHIP WITH CARTILAGE THICKNESS IN ANTERIOR CRUCIATE LIGAMENT INJURED COPERS AND NON-COPERS	N. M. Brisson, L. A. Krahl ¹ , W. Wirth ^{2,3,4} , F. Eckstein ^{2,3,4} , G. N. Duda ¹ , ¹ Julius Wolff Inst., Berlin Inst. of Hlth.at Charité – Univ.smedizin Berlin, Berlin, Germany, ² Inst. of Anatomy & Cell Biology, Paracelsus Med. Univ., Salzburg, Austria, ³ Ludwig Boltzmann Inst., Paracelsus Med. Univ., Salzburg, Austria, ⁴ Chondrometrics GmbH, Ainring, Germany
77	MUSCLE ACTIVITY AND KNEE FLEXION ANGLE DURING STANDING IN PEOPLE WITH KNEE OSTEOARTHRITIS	S. J. Preece, W. Alghamdi ² , E. Stafford ¹ , R. K. Jones ¹ , ¹ Univ. of Salford, Manchester, United Kingdom, ² Al Baha Univ., Al Baha, Saudi Arabia

- 78 COMPARING GROUND REACTION FORCE PROFILES IN INDIVIDUALS EARLY FOLLOWING ANTERIOR CRUCIATE LIGAMENT RECONSTRUCTION TO INDIVIDUALS WITH RADIOGRAPHIC KNEE OSTEOARTHRITIS E. Bjornsen, D. Berkoff1, T. Blackburn1, H. Davis-Wilson2, A. Evans-Pickett1, J. Franz3, M. Harkey4, C. Lisee1, B. Luc-Harkey5, A. Munsch3, D. Nissman1, S. Pfeiffer6, B. Pietrosimone1, 1Univ. of North Carolina, Chapel Hill, NC, 2RTI Intl., Research Triangle Park, NC, 3Univ. of North Carolina and North Carolina State Univ., Chapel Hill, NC, 4Michigan State Univ., East Lansing, MI, 5Massachusetts Gen. Hosp., Boston, MA, 6Hlth.Advocate, Huntersville, NC
- 79 THERE IS A HIGHER PERCENTAGE OF INDIVIDUALS WITH PRE-OA AT THE KNEE THAN CONTROLS WALKING WITH A WIDELY LATERAL CENTER OF PRESSURE P. Margain, P. Omoumi, B. Jolles, J. Favre, Lausanne Univ. Hosp. and Univ. of Lausanne, Lausanne, Switzerland
- 80 THE EFFECT OF REDUCING SAMPLING RATE ON ELECTROMYOGRAPHY PARAMETERS DURING GAIT IN PATIENTS WITH KNEE OSTEOARTHRITIS D. Cava, T. Birmingham, R. Willing, Western Univ., London, ON, Canada
- 81 GAIT AND PHYSICAL ACTIVITY PREDICTORS OF KNEE REPLACEMENT IN THE MULTICENTER OSTEOARTHRITIS STUDY: A MACHINE LEARNING ANALYSIS K. E. Costello,2, D. T. Felson2, S. R. Jafarzadeh2, N. A. Segal3, C. E. Lewis4, M. Nevitt5, V. B. Kolachalama2, D. Kumar2, 1Univ. of Florida, Gainesville, FL, 2Boston Univ., Boston, MA, 3Univ. of Kansas Med. Ctr., Kansas City, KS, 4Univ. of Alabama at Birmingham, Birmingham, AL, 5Univ. of California San Francisco, San Francisco, CA
- 83 ACUTE AND DELAYED EFFECTS OF MODIFYING LOAD DURING WALKING ON SERUM CARTILAGE OLIGOMERIC MATRIX PROTEIN FOLLOWING ACL RECONSTRUCTION C. Armitano-Lago, A. Evans-Pickett1, H. C. Davis-Wilson2, A. E. Munsch1, L. Longobardi1, H. Willcockson1, T. A. Schwartz1, J. R. Franz1, B. Pietrosimone1, 1Univ. of North Carolina at Chapel Hill, Chapel Hill, NC, 2RTI Intl., Research Triangle Park, NC
- 84 EFFECT OF WALKING ASYMMETRY ON BIOMECHANICAL COMPENSATIONS: IMPLICATIONS FOR SINGLE TO MULTI-JOINT OSTEOARTHRITIS PROGRESSION S. K. Price, J. J. Stefanik2, K. G. Silbernagel3, P. Corrigan1, 1Saint Louis Univ., St. Louis, MO, 2Northeastern Univ., Boston, MA, 3Univ. of Delaware, Newark, DE
- 85 ASSOCIATIONS BETWEEN GAIT VARIABILITY AND PATIENT REPORTED OUTCOMES FOLLOWING ANTERIOR CRUCIATE LIGAMENT RECONSTRUCTION J. Mo, C. Armitano-Lago, E. S. Bjornsen, C. M. Lisee, J. R. Franz, B. Pietrosimone, Univ. of North Carolina at Chapel Hill, Chapel Hill, NC
- 86 PHENOTYPES BASED ON KINEMATIC PROFILES IN INDIVIDUALS WITH MID- TO LATE-STAGE KNEE OSTEOARTHRITIS Z. Bensaddek1, N. Mezghani1, K. Loulou1, Y. Ouakrim1, A. Cagnin2, N. J. Bureau3, N. Hagemester2, 1TELUQ Univ., Montreal, QC, Canada, 2École de technologie supérieure, LIO, CRCHUM, Montreal, QC, Canada, 3Université de Montréal, Radiology, Montreal, QC, Canada
- 87 ASYMMETRIC GROUND REACTION FORCES WHILE WALKING ARE NOT ASSOCIATED WITH UNILATERAL TO BILATERAL KNEE OSTEOARTHRITIS PROGRESSION: THE MULTICENTER OSTEOARTHRITIS STUDY P. Corrigan, C. Lewis2, K. Costello3, A. Guermazi4, F. Roemer5, D. Kumar2, D. Felson4, K. Bacon4, T. Neogi4, M. LaValley2, M. Nevitt6, C. Lewis7, J. Torner8, J. Stefanik9, 1Saint Louis Univ., St. Louis, MO, 2Boston Univ., Boston, MA, 3Univ. of Florida, Gainesville, FL, 4Boston Univ. Med. Ctr., Boston, MA, 5Univ. sklinikum Erlangen, Erlangen, Germany, 6Univ. of California San Francisco, San Francisco, CA, 7Univ. of Alabama Birmingham, Birmingham, AL, 8Univ. of Iowa, Iowa City, IA, 9Northeastern Univ., Boston, MA
- 88 VARIATIONS IN ARTICULAR SURFACE COLLAGEN FIBRIL ORIENTATIONS PRODUCE SIMILAR SHEAR STRESSES AND STRAIN CALCULATIONS THROUGHOUT THE DEPTH OF CARTILAGE N. Szabo, M. J. Brouillette, J. E. Johnson, J. E. Goetz, Univ. of Iowa, Iowa City, IA
- 89 EVALUATION OF THE DIAGNOSTIC ABILITIES OF ACR, EULAR AND NICE CRITERIA AGAINST CLINICALLY RELEVANT KNEE OSTEOARTHRITIS; DATA FROM THE CHECK COHORT Q. Wang, Jr., J. Runhaar1, M. Kloppenburg2, M. Boers3, J. Bijlsma4, S. Bierma-Zeinstra1, CREDO expert group, 1Erasmus Med. center, Rotterdam, Netherlands, 2Leiden Univ. Med. Ctr., Leiden, Netherlands, 3Amsterdam Univ. Med. Ctr., Amsterdam, Netherlands, 4Univ. Med. Ctr. Utrecht, Utrecht, Netherlands
- 90 THE IMPACT OF COMORBID CONDITIONS ON CLINICAL MANIFESTATIONS OF KNEE OSTEOARTHRITIS GRADES 3-4 K. V. Korochina, T. V. Chernysheva, I. E. Korochina, Orenburg State Med. Univ., Orenburg, Russian Federation

- 91 PSYCHOMETRIC ANALYSIS OF THE OXFORD SHOULDER SCORE FOR USE IN EVALUATING OUTCOMES FROM PRIMARY SHOULDER REPLACEMENT SURGERY S-E. Soh¹, Y. Fang¹, I. Harris², R. Page³, I. N. Ackerman, ¹Monash Univ., Melbourne, Australia, ²Univ. of New South Wales, Sydney, Australia, ³Barwon Hlth.and Deakin Univ., Geelong, Australia
- 92 CLINICAL EFFICACY OF ALENDRONATE COMBINED WITH CALCIUM IN THE TREATMENT OF POSTMENOPAUSAL OSTEOPOROSIS AND ITS EFFECT ON RELATED INFLAMMATORY FACTORS Z. Gao, B. Dong², W. Kang², P. Yuan², D. Liu², ¹Shaanxi Univ. of Chinese Med., Xianyang, China, ²Affiliated Hosp. of Shaanxi Univ. of traditional Chinese Med., Xianyang, China
- 93 WITHIN-PERSON CHANGE IN PATIENT-REPORTED OUTCOMES AND THEIR ASSOCIATION WITH THE WISH TO UNDERGO JOINT SURGERY DURING A DIGITAL FIRST-LINE INTERVENTION FOR OSTEOARTHRITIS A. Dell 'Isola, H. Nero, A. Cronström, S. Lohmander, L. Dahlberg, A. Kiadaliri, Lund Univ., Lund, Sweden
- 94 PHYSICAL ACTIVITY AND PRIMARY KNEE REPLACEMENT FOLLOWING KNEE OSTEOARTHRITIS: AN ANALYSIS FROM THE OSTEOARTHRITIS INITIATIVE H. Peng¹, Q. Cai¹, Y. Feng¹, V. Duong², S. Robbins², K. FU, D. Hunter², ¹Shanghai Sixth People's Hosp. Affiliated to Shanghai Jiao Tong Univ. Sch. of Med., Xuhui District, China, ²The Univ. of Sydney, Sydney, Australia
- 95 FREQUENCY AND CORRELATES OF MULTISITE JOINT INVOLVEMENT IN PATIENTS WITH THUMB-BASE HAND OSTEOARTHRITIS A. V. Perruccio, E. M. Badley, D. Antfleke, J. Power, H. Baltzer, Schroeder Arthritis Inst., Univ. Hlth.Network, Toronto, ON, Canada
- 96 KNEE EXTENSOR AND FLEXOR STRENGTH AND RISK OF STRUCTURAL WORSENING IN THOSE WITH, OR AT RISK OF, KNEE OSTEOARTHRITIS: A SYSTEMATIC REVIEW OF LONGITUDINAL STUDIES B. E. Patterson, M. A. Girdwood¹, T. J. West¹, A. M. Bruder¹, B. Oiestad², C. Juhl³, A. G. Culvenor¹, ¹La Trobe Univ., Melbourne, Australia, ²Oslo Metropolitan Univ., Oslo, Norway, ³Univ. of Southern Denmark, Odense, Denmark
- 97 TENNIS IS NOT ASSOCIATED WITH SYMPTOMATIC RADIOGRAPHIC KNEE OSTEOARTHRITIS: DATA FROM THE OSTEOARTHRITIS INITIATIVE R. Madan, J. B. Driban², T. E. McAlindon², A. M. Kriska³, B. J. Rockette-Wagner³, C. B. Eaton⁴, M. C. Hochberg⁵, R. D. Jackson⁶, C. K. Kwok⁷, M. C. Nevitt⁸, G. H. Lo^{1,9}, ¹Baylor Coll. of Med., Houston, TX, ²Tufts Med. Ctr., Boston, MA, ³Univ. of Pittsburgh Med. Ctr., Pittsburgh, PA, ⁴Alpert Med. Sch. of Brown Univ., Providence, RI, ⁵Univ. of Maryland Sch. of Med., Baltimore, MD, ⁶The Ohio State Univ., Columbus, OH, ⁷Univ. of Arizona Coll. of Med., Tucson, AZ, ⁸Univ. of California, San Francisco, San Francisco, CA, ⁹Michael E Debaakey VA Med. Ctr., Houston, TX
- 98 INVESTIGATING DIFFERENCES IN DIABETES IMPACT BY SEX AND BODY MASS INDEX IN HIP AND KNEE OSTEOARTHRITIS PATIENTS UNDERGOING TOTAL JOINT ARTHROPLASTY J. Power, A. V. Perruccio, J. Davey, R. Gandhi, K. Syed, C. Veillette, N. N. Mahomed, Y. Rampersaud, Schroeder Arthritis Inst., Univ. Hlth.Network, Toronto, ON, Canada
- 99 LUMBAR SPINAL STENOSIS SYMPTOMS AND PATIENT EDUCATION AND EXERCISE THERAPY OUTCOMES IN PEOPLE WITH KNEE OR HIP OSTEOARTHRITIS J. J. Young², A. Kongsted^{1,3}, J. Hartvigsen^{1,3}, E. M. Roos¹, C. Ammendolia^{4,5}, S. T. Skou^{1,6}, D. T. Grønne¹, R. K. Jensen^{1,3}, ¹Univ. of Southern Denmark, Odense, Denmark, ²Univ. Hlth.Network, Toronto, ON, Canada, ³Chiropractic Knowledge Hub, Odense, Denmark, ⁴Mount Sinai Hosp., Toronto, ON, Canada, ⁵Univ. of Toronto, Toronto, ON, Canada, ⁶Næstved-Slagelse-Ringsted Hosp., Slagelse, Denmark
- 100 THE EFFECT OF STRENGTH TRAINING OR CYCLING ON QUALITY OF LIFE AND KNEE FUNCTION IN PATIENTS WITH KNEE OSTEOARTHRITIS. A RANDOMISED CONTROLLED TRIAL B. E. Oiestad, A. Aarøen², J. Røtterud², N. Østerås³, E. Jarstad⁴, M. Risberg⁵, ¹Oslo Metropolitan Univ., Oslo, Norway, ²Akershus Univ. Hosp., Lørenskog, Norway, ³Diakonhjemmet Hosp., Oslo, Norway, ⁴NIMI Volvat, Oslo, Norway, ⁵Oslo Univ. Hosp. and Norwegian Sch. of Sport Sci., Oslo, Norway
- 101 THE LONGITUDINAL ASSOCIATION OF RADIOGRAPHIC CHONDROCALCINOSIS WITH LOCATION-SPECIFIC CARTILAGE LOSS ON MRI IN KNEE OA: THE MULTICENTER OSTEOARTHRITIS STUDY J. W. Liew, A. Guermazi¹, M. Jarraya², N. Wang¹, D. Felson¹, C. E. Lewis³, J. Lynch⁴, M. Nevitt⁴, J. Torner⁵, T. Neogi¹, ¹Boston Univ., Boston, MA, ²Massachusetts Gen. Hosp., Boston, MA, ³Univ. of Alabama Birmingham, Birmingham, AL, ⁴Univ. of California San Francisco, San Francisco, CA, ⁵Univ. of Iowa, Iowa City, IA

102	DOES HSCRP PROVIDE INSIGHTS INTO AN INFLAMMATORY PHENOTYPE OF KNEE OSTEOARTHRITIS? DATA FROM THE MULTICENTER OSTEOARTHRITIS STUDY	T. Neogi, C. E. Lewis ² , N. Wang ¹ , M. Nevitt ³ , I. Tolstykh ³ , J. Torner ⁴ , D. Felson ¹ , ¹ Boston Univ. Sch. of Med., Boston, MA, ² Univ. of Alabama at Birmingham, Birmingham, AL, ³ Univ. of California at San Francisco, San Francisco, CA, ⁴ Univ. of Iowa, Iowa City, IA
103	SELECTIVE PATELLAR RESURFACING IN TOTAL KNEE ARTHROPLASTY FOR THE OSTEOARTHRITIC KNEE: A PROSPECTIVE STUDY	i. moriyama, Ogikubo Hosp., Tokyo, Japan
104	DISCORDANCE BETWEEN SELF-REPORTED AND PERFORMANCE-BASED PHYSICAL FUNCTION IN PATIENTS WITH KNEE OSTEOARTHRITIS: ASSOCIATIONS WITH PAIN INTENSITY AND NEGATIVE AFFECT	Y-H. Pua ² , B. Y. Tan ^{3,4} , J. Low ¹ , E-L. Woon ¹ , S-J. Yeo ¹ , R. Clark ⁵ , M. J. Pereira ⁶ , C-Y. Tan ³ , J. Thumboo ^{2,1,7} , ¹ Singapore Gen. Hosp., Singapore, Singapore, ² Duke-NUS Graduate Med. Sch., Singapore, Singapore, ³ Woodlands Hlth., Singapore, Singapore, ⁴ Nanyang Technological Univ., Singapore, Singapore, ⁵ Univ. of the Sunshine Coast, Sunshine Coast, Australia, ⁶ Natl. Hlth.care Group, Singapore, Singapore, ⁷ SingHlth. Office of Regional Hlth., Singapore, Singapore
105	DIFFERENCES IN PAIN, FUNCTION, AND MOBILITY AMONG OBESITY CLASSES IN ADULTS WITH KNEE OSTEOARTHRITIS	S. P. Messier, M. Ellington ¹ , S. Mihalko ¹ , D. Beavers ² , K. Queen ³ , G. D. Miller ¹ , E. Losina ⁴ , J. N. Katz ⁴ , R. F. Loeser ⁵ , P. DeVita ⁶ , D. J. Hunter ⁷ , L. F. Callahan ⁵ , ¹ Wake Forest Univ., Winston-Salem, NC, ² Wake Forest Sch. of Med., Winston-Salem, NC, ³ Haywood Med. Ctr., Clyde, NC, ⁴ Brigham and Women's Hosp., Boston, MA, ⁵ Univ. of North Carolina at Chapel Hill, Chapel Hill, NC, ⁶ East Carolina Univ., Greenville, NC, ⁷ Univ. of Sydney, Sydney, Australia
106	DEVELOPMENT OF A COMPOSITE MEASURE OF PHYSICAL PERFORMANCE USING ITEM RESPONSE THEORY	L. Arbeeve, T. A. Schwartz ¹ , R. Loeser ¹ , L. F. Callahan ¹ , A. E. Nelson ¹ , C. Alvarez ¹ , R. J. Cleveland ¹ , J. B. Driban ² , K. Barger ³ , K. Shea ³ , Y. Golightly ⁴ , L. M. Thoma ¹ , K. D. Allen ¹ , ¹ UNC at Chapel Hill, Chapel Hill, NC, ² Tufts Univ. Sch. of Med., Boston, MA, ³ Tufts Univ., Boston, MA, ⁴ Univ. of Nebraska Med. Ctr., Omaha, NE
107	THE NATURAL HISTORY OF END-STAGE KNEE OSTEOARTHRITIS: DATA FROM THE OSTEOARTHRITIS INITIATIVE	J. B. Driban, L. L. Price ^{1,2} , B. Lu ³ , K. Flechsenhar ⁴ , G. H. Lo ^{5,6} , T. E. McAlindon ¹ , ¹ Tufts Med. Ctr., Boston, MA, ² Tufts Univ., Boston, MA, ³ Univ. of Connecticut Hlth.Ctr., Farmington, CT, ⁴ Sanofi, Frankfurt am Main, Germany, ⁵ Houston VA HSR&D Ctr. for Innovations in Quality, Effectiveness and Safety, Michael E. DeBakey VAMC, Houston, TX, ⁶ Baylor Coll. of Med., Houston, TX
108	SYNOVIAL VASCULARITY AND HYPERPLASIA ON ULTRASOUND ARE ASSOCIATED WITH IMPROVEMENT IN WOMAC PAIN AND FUNCTION AFTER INTRA-ARTICULAR CORTICOSTEROID INJECTION OF OA KNEES	R. S. Dima, T. Birmingham ¹ , R. Pinto ¹ , H. Philpott ¹ , M. Carter ¹ , Y. Zhu ¹ , A. Fenster ¹ , D. Bryant ¹ , C. Appleton ² , ¹ Western Univ., London, ON, Canada, ² Schulich Sch. of Med. and Dentistry, London, ON, Canada
109	THE PROGNOSTIC POTENTIAL OF END-STAGE KNEE OSTEOARTHRITIS AND ITS COMPONENTS TO PREDICT FUTURE KNEE REPLACEMENT: DATA FROM THE OSTEOARTHRITIS INITIATIVE	J. B. Driban, B. Lu ² , K. Flechsenhar ³ , G. H. Lo ^{4,5} , T. E. McAlindon ¹ , ¹ Tufts Med. Ctr., Boston, MA, ² Univ. of Connecticut Hlth.Ctr., Farmington, CT, ³ Sanofi, Frankfurt am Main, Germany, ⁴ Houston VA HSR&D Ctr. for Innovations in Quality, Effectiveness and Safety, Michael E. DeBakey VAMC, Houston, TX, ⁵ Baylor Coll. of Med., Houston, TX
110	LONGITUDINAL ANALYSIS BETWEEN THE PROGRESSION OF KNEE OSTEOARTHRITIS AND PHYSICAL ACTIVITY: DATA FROM THE OSTEOARTHRITIS INITIATIVE	J. Kushioka, R. Sun, M. Smuck, Stanford Univ. Sch. of Med., Palo Alto, CA
111	IMMEDIATE EFFECTS OF JOINT LOADING ACTIVITIES ON KNEE AND HIP CARTILAGE. A SYSTEMATIC REVIEW AND META-ANALYSIS	S. L. Coburn, K. M. Crossley ¹ , J. L. Kemp ¹ , S. J. Warden ² , T. J. West ¹ , A. M. Bruder ¹ , B. F. Mentiplay ¹ , A. G. Culvenor ¹ , ¹ La Trobe Univ., Bundoora, Australia, ² Indiana Univ., Indianapolis, IN

- 112 ONLINE DELIVERY OF EXERCISE AND EDUCATION FOR INDIVIDUALS WITH KNEE OSTEOARTHRITIS - A MIXED METHODS APPROACH COMPARING ONLINE AND ONSITE DELIVERY MODELS AND INVESTIGATING THE CONSUMER EXPERIENCE P. M. Holm², E. M. Roos², D. T. Grønne², C. P. Simony¹, D. Bødtger³, M. Beck¹, L. H. Tang¹, M. Nyberg¹, B. Clausen^{1,4}, S. T. Skou^{1,2}, ¹The Res. Unit PROgrez, Dept. of Physiotherapy and Occupational Therapy, Næstved-Slagelse- Ringsted Hosp., Region Zealand, Slagelse, Denmark, ²The Res. Unit for Musculoskeletal Function and Physiotherapy, Dept. of Sports Sci. and Clinical Biomechanics, Univ. of Southern Denmark, Odense, Denmark, ³Absalon Univ. Coll., Region Zealand, Næstved, Denmark, ⁴Sano Rheumatology Hosp., Region Zealand, Skælskør, Denmark
- 113 ASSOCIATIONS BETWEEN PAIN REDUCTION AFTER PARTICIPATION IN FIRST-LINE OSTEOARTHRITIS MANAGEMENT PROGRAMS FOR HIP AND KNEE OSTEOARTHRITIS AND PROGRESSION TO JOINT SURGERY: A REGISTRY-BASED STUDY OF 44000 PATIENTS. T. S. Jönsson, A. Cronström¹, O. Rolfson², E. Ageberg¹, K. Gustafson³, ¹Univ. of Lund, Lund, Sweden, ²Sahlgrenska Academy, Inst. of Clinical Sci., Univ. of Gothenburg, Gothenburg, Sweden, ³Linköping Univ., Linköping, Sweden
- 115 COMPARING PATIENT PROFILES IN TOTAL KNEE ARTHROPLASTY AND EDUCATION AND EXERCISE THERAPY PROGRAMS FOR KNEE OSTEOARTHRITIS J. J. Young², M. Zywiell^{1,3}, A. V. Perruccio^{1,3}, ¹Univ. Hlth.Network, Toronto, ON, Canada, ²Univ. of Southern Denmark, Odense, Denmark, ³Univ. of Toronto, Toronto, ON, Canada
- 116 RADIOGRAPHICALLY DETECTABLE INTRA-ARTICULAR MINERALIZATION: PREDICTOR OF KNEE OSTEOARTHRITIS OR ONLY AN INDICATOR OF AGING? DATA FROM THE OSTEOARTHRITIS INITIATIVE H. A. Ibad¹, R. M. Kwee², F. W. Roemer³, A. Guermazi³, S. Demehri, ¹Johns Hopkins Univ. Sch. of Med., Baltimore, MD, ²Zuyderland Med. Ctr., Heerlen/Sittard/Geleen, Netherlands, ³Boston Univ. Sch. of Med., Boston, MA
- 117 PATIENT APPROPRIATENESS FOR TOTAL KNEE ARTHROPLASTY AND PREDICTED PROBABILITY OF A GOOD OUTCOME G. Hawker, E. Bohm², M. Dunbar³, P. Faris⁴, C. Jones⁵, T. Noseworthy⁴, B. Ravi¹, L. Woodhouse⁶, D. Marshall⁴, ¹Univ. of Toronto, Toronto, ON, Canada, ²Univ. of Manitoba, Winnipeg, MB, Canada, ³Dalhousie Univ., Halifax, NS, Canada, ⁴Univ. of Calgary, Calgary, AB, Canada, ⁵Univ. of Alberta, Edmonton, AB, Canada, ⁶Tufts Univ., Phoenix, AZ
- 118 PROFILES OF PATIENTS WITH HIP OSTEOARTHRITIS RECEIVING TOTAL HIP ARTHROPLASTY COMPARED TO AN EDUCATION AND EXERCISE PROGRAM J. J. Young², A. V. Perruccio^{1,3}, M. Zywiell^{1,3}, ¹Univ. Hlth.Network, Toronto, ON, Canada, ²Univ. of Southern Denmark, Odense, Denmark, ³Univ. of Toronto, Toronto, ON, Canada
- 119 IDENTIFYING A LIKELY OSTEOARTHRITIS SUBGROUP AMONG LOW BACK PAIN PATIENTS IN AN INTERPROFESSIONAL EDUCATION AND SELF-MANAGEMENT MODEL OF CARE: RESULTS OF A LATENT CLASS ANALYSIS K. Sundararajan, I. Jurisica, A. V. Perruccio, Y. R. Rampersaud, Univ. Hlth.Network, Toronto, ON, Canada
- 120 PREVALENCE OF SARCOPENIC OBESITY IN INDIVIDUALS WITH ADVANCED KNEE OSTEOARTHRITIS AND A BODY MASS INDEX ≥ 35 KG/M² K. Godziuk, F. T. Vieira¹, M. Forhan², C. M. Prado¹, ¹Univ. of Alberta, Edmonton, AB, Canada, ²Univ. of Toronto, Toronto, ON, Canada
- 121 BMI, PHYSICAL FUNCTION AND OSTEOARTHRITIS SEVERITY CORRELATE WITH PHYSICAL FUNCTION ONE YEAR AFTER TOTAL KNEE ARTHROPLASTY: A SYSTEMATIC REVIEW AND META-ANALYSIS BMI, PHYSICAL FUNCTION AND OSTEOARTHRITIS SEVERITY CORRELATE WITH PHYSICAL FUNCTION ONE YEAR AFTER TOTAL KNEE ARTHROPLASTY: A SYSTEMATIC REVIEW AND META-ANALYSIS U. Olsen², M. F. Lindberg^{1,2}, C. Rose³, E. Denison³, C. Gay^{4,2}, A. Aamodt², J. I. Brox^{5,1}, Ø. Skare², O. Furnes^{6,7}, K. Lee⁴, A. Lerdal^{1,2}, ¹Univ. of Oslo, Oslo, Norway, ²Lovisenberg Diaconal Hosp., Oslo, Norway, ³Norwegian Inst. of Publ. Hlth., Oslo, Norway, ⁴Univ. of California, San Francisco, CA, ⁵Oslo Univ. Hosp., Oslo, Norway, ⁶Haukeland Univ. Hosp., Oslo, Norway, ⁷Univ. of Bergen, Bergen, Norway
- 122 FLARE SHORT-FORM FOR KNEE AND HIP OSTEOARTHRITIS: SCALE VALIDATION BY A RASCH MODEL F. Queiroga¹, J. Epstein¹, M-L. Erpelding¹, E. Spitz¹, J-F. Maillefert², B. Fautrel³, L. F. Callahan⁴, D. J. Hunter⁵, F. Guillemin¹, ¹Université de Lorraine, Nancy, France, ²Université de Dijon, Dijon, France, ³Université de Sorbonne, Paris, France, ⁴Univ. of North Carolina, North Carolina, NC, ⁵Univ. of Sydney, Sydney, Australia

- 123 MINDFULNESS IS ASSOCIATED WITH PHYSICAL AND PSYCHOLOGICAL HEALTH IN PATIENTS WITH KNEE OSTEOARTHRITIS DURING THE COVID-19 PANDEMIC: A CROSS-SECTIONAL ANALYSIS S. Oomen-Lochtefeld¹, L. Price², B. Suerig², C. Wang, Sr.², ¹Tufts Med. Ctr., Hingham, MA, ²Tufts Med. Ctr., Boston, MA
- 124 BETTER MANAGEMENT OF KNEE OSTEOARTHRITIS: CHINESE MEDICINE TREATMENT GUIDELINE W. Chen, C. Ding², C. Wang³, Y. Ma⁴, Q. Wang¹, Z. Wang⁵, D. Xing⁶, Y. Liu⁷, W. Liu⁸, Q. Ji⁹, S. Li¹⁰, J. Shen¹¹, Z. Chen¹, N. Lin¹², J. Jin¹³, P. Yuan¹⁴, Y. Cao¹⁵, P. Tong¹⁶, Y. Jin¹⁷, H. Zhan¹⁵, X. Fan¹⁸, Y. Zhang¹², Z. Xue¹, Y. Jia¹, Y. Yan¹, ¹The Third Affiliated Hosp. of Beijing Univ. of Chinese Med., Beijing, China, ²Zhujiang Hosp. of Southern Med. Univ., Guangzhou, China, ³Tufts Med. Ctr., Tufts Univ. Sch. of Med., Boston, MA, ⁴Nanjing Univ. of Chinese Med., Nanjing, China, ⁵The Journal of Traditional Chinese Orthopedics and Traumatology, Luoyang, China, ⁶Peking Univ. People's Hosp., Beijing, China, ⁷Luoyang Orthopedic-Traumatological Hosp. of Henan Province, Luoyang, China, ⁸Guangdong Second Traditional Chinese Med. Hosp., Guangzhou, China, ⁹Beijing Hosp., Beijing, China, ¹⁰Gansu Provincial Hosp. of Traditional Chinese Med., Lanzhou, China, ¹¹Jiangsu Province Hosp. of Chinese Med., Nanjing, China, ¹²Inst. of Chinese Materia Medica, China Academy of Chinese Med. Sci., Beijing, China, ¹³Peking Union Med. Coll. Hosp., Beijing, China, ¹⁴Affiliated Hosp. of Shanxi Univ. of Chinese Med., Xian, China, ¹⁵Shuguang Hosp. Affiliated to Shanghai Univ. of Traditional Chinese Med., Shanghai, China, ¹⁶Zhejiang Provincial Hosp. of Chinese Med., Hangzhou, China, ¹⁷Zhongnan Hosp. of Wuhan Univ., Wuhan, China, ¹⁸Hosp. of Chengdu Univ. of Traditional Chinese Med., Chengdu, China
- 125 LONG TERM EFFECTS OF VITAMIN D SUPPLEMENTATION AND MAINTAINING SUFFICIENT VITAMIN D ON KNEE OSTEOARTHRITIS OVER FIVE YEARS Z. Wang, Z. Zhu², F. Pan¹, S. Zheng³, V. Parameswaran⁴, L. Blizzard¹, C. Ding², B. Antony¹, ¹Menzies Inst. for Med. Res., Univ. of Tasmania, Hobart, Australia, ²Zhujiang Hosp., Southern Med. Univ., Guangzhou, China, ³Arthritis Res. Inst., the First Affiliated Hosp. of Anhui Med. Univ., Hefei, China, ⁴Royal Hobart Hosp., Hobart, Australia
- 126 KNEE-RELATED QUALITY OF LIFE 20 AND 35 YEARS AFTER AN ANTERIOR CRUCIATE LIGAMENT INJURY TREATED SURGICALLY OR NON-SURGICALLY J. Kvist², M. Pettersson³, ¹Unit of Physiotherapy, Linköping University, Sweden, ²Stockholm Sports Trauma Res. Ctr., Karolinska Institute, Stockholm, Sweden, ³Sch. of Med. Sci., Örebro University, Sweden
- 127 MEDIAL MENISCUS EXTRUSION IS A RISK FACTOR FOR PROGRESSION OF KNEE STIFFNESS IN MIDDLE-AGED POPULATIONS WITH KELLGREN-LAWRENCE GRADE 0 - THE OSTEOARTHRITIS INITIATIVE T. Yamamura², H. Kaneko^{1,2}, A. Adili^{1,3}, L. Liu^{2,3}, T. Aoki², J. Tomura^{1,2}, S. Wakana^{1,2}, Y. Machiyama^{1,2}, Y. Tamura^{3,4}, M. Kubota^{1,2}, M. Ishijima^{1,2,3}, ¹Dept. of Med. for Orthopedics and Motor Organ, Juntendo Univ. Graduate Sch. of Med., Tokyo, Japan, Tokyo, Japan, ²Dept. of Orthopaedics, Juntendo Univ., Faculty of Med., Tokyo, Japan, Tokyo, Japan, ³Sportology Ctr., Juntendo Univ. Graduate Sch. of Med., Tokyo, Japan, Tokyo, Japan, ⁴Metabolism and Endocrinology, Juntendo Univ. Graduate Sch. of Med., Tokyo, Japan, Tokyo, Japan
- 128 RELATION BETWEEN BONE CHARACTERISTICS AND HIP OSTEOARTHRITIS IN A COHORT OF POST-MENOPAUSAL WOMEN: THE QUALYOR STUDY M. Auroux, J. Grapinet¹, J-B. Pialat¹, P-H. Himpens¹, B. Merle², E. Fontanges¹, F. Duvert¹, M. Proriot¹, P. Szulc², E. Lespessailles³, R. Chapurlat¹, ¹Hospices Civils de Lyon, LYON, France, ²INSERM U1033, LYON, France, ³Ctr. Hosp.ier d'Orléans, ORLEANS, France
- 129 AN ESTIMATE OF SEDENTARY BEHAVIOR IN ADULTS WITH KNEE OSTEOARTHRITIS AND EXPLORATORY ASSOCIATIONS WITH BASELINE CHARACTERISTICS T. K. Bye, J. Jakiela, A. Pechstein, J. Aily, L. Schmitt, D. Voinier, D. White, Univ. of Delaware, Newark, DE
- 130 CLINICAL OBSERVATION OF ZHENWU SOUP COMBINED WITH SODIUM HYALURONATE FOR THE TREATMENT OF KNEE OSTEOARTHRITIS z. yang, W. Li², ¹Shaanxi Univ. of Traditional Chinese Med., Xianyang, China, ²Ningqiang County Tianjin Hosp., Hanzhong, China
- 131 IS DIFFICULTY CLIMBING STAIRS AN EARLY SIGN THAT A KNEE REPLACEMENT IS ON THE HORIZON? J. T. Jakiela, D. Voinier¹, J. A. Horney¹, Y. M. Golightly², T. K. Bye¹, A. E. Pechstein¹, D. K. White¹, ¹Univ. of Delaware, Newark, DE, ²Univ. of Nebraska Med. Ctr., Omaha, NE

- 132 EROSIIVE OR INFLAMMATORY HAND OA (HOA): A MORE SEVERE DISEASE? CROSS-SECTIONAL STUDY OF BASELINE ASSOCIATED RISK FACTORS AMONG PATIENTS FROM THE DIGICOD COHORT E. MAHEU, S. TUFFET2, A. ROUSSEAU2, M. D. CREMA3, M. KLOPPENBURG4, F. RANNOU5, F. BERENBAUM6, J. SELLAM6, 1St Antoine Hosp., APHP, Paris, France, 2St Antoine Hosp., APHP, URCEST, Paris, France, 3French Natl. Inst. of Sports (INSEP), Paris, France, 4Leiden Univ. Med. Ctr. (LUMC), Leiden, Netherlands, 5Univ. of Paris-Ctr., Cochin Hosp., AP-HP, Paris, France, 6St Antoine Hosp., APHP, Sorbonne Univ., Faculty of Med., UFR of Med., Paris, France
- 133 FAILURE RATES AND OUTCOME ASSESSMENT FOLLOWING MINIMALLY INVASIVE SURGERY IN SPINE OSTEOARTHRITIS PATIENTS G. S. Bullock, C. Snagio, E. C. Beck, A. K. Gowd, K. Danelson, T. O'Gara, Wake Forest Sch. of Med., Winston-Salem, NC
- 134 NONSTEROIDAL ANTI-INFLAMMATORY DRUGS AS ACUTE TREATMENT FOR PAIN: WHAT IS THE RELATIONSHIP BETWEEN THEIR USE AND BODY MASS INDEX, RISK OF SARCOPENIA AND CATASTROPHIZING IN KNEE OSTEOARTHRITIS? N. A. Casonato, P. J. Venturini, F. Sette, M. A. Gyaraki, J. B. Aily, S. M. Mattiello, Federal Univ. of São Carlos, São Carlos, Brazil
- 135 POST HOC ANALYSES OF 52 WEEK PAIN RESPONDER INDICES TO EXPLORE CLINICALLY MEANINGFUL OUTCOMES AFTER INTRA-ARTICULAR TISSUEGENE-C (TG-C): DATA FROM A KNEE OSTEOARTHRITIS RANDOMIZED TRIALPOST HOC ANALYSES OF 52 WEEK PAIN RESPONDER INDICES TO EXPLORE CLINICALLY MEANINGFUL OUTCOMES AFTER INTRA-ARTICULAR TISSUEGENE-C (TG-C): DATA FROM A KNEE OSTEOARTHRITIS RANDOMIZED TRIAL P. Conaghan1, M. Wang2, S. Kim2, 1Univ. of Leeds, Leeds, United Kingdom, 2Kolon TissueGene, Rockville, MD
- 136 LONG-TERM SAFETY OF TG C: SAFETY ANALYSIS OF LONG TERM SAFETY TRIAL OVER 14 YEARS D. Hunter, M. Wang2, S. Kim2, 1Florance and Cope Chair of Rheumatology at Univ. of Sydney, Sydney, Australia, 2Kolon TissueGene, Rockville, MD
- 137 OSTEOARTHRITIS PATIENTS WITH PAIN SCORES MORE THAN 8/10 SHOULD BE ANALYZED SEPARATELY OR EXCLUDED FROM CLINICAL TRIAL PROTOCOLS, AS 72% SCREEN POSITIVE FOR FIBROMYALGIA AND/OR DEPRESSION ON A MULTIDIMENSIONAL HEALTH ASSESSMENT QUESTIONNAIRE J. Schmukler, K. A. Gibson2, T. Li3, J. A. Block1, T. Pincus1, 1Rush Univ. Sch. of Med., Chicago, IL, 2Univ. of New South Wales, Liverpool, Sydney, Australia, 3Georgetown Univ., Washington, DC
- 138 ANTERIOR, MEDIAL, AND POSTERIOR TIBIAL OSTEOPHYTES INCREASE RISK FOR MEDIAL MENISCUS COMPLETE TEAR IN ELDERLIES WITH KNEE OSTEOARTHRITIS -THE BUNKYO HEALTH STUDY A. Adili,2,3, Y. Negishi1, H. Kaneko1,2, L. Liu1,3, T. Aoki1, J. Tomura1,2, S. Wakana1,2, Y. Machiyama1,2, T. Yamamura1,2, M. Yokoyama1,3, Y. Kim1, K. Kobayashi1, M. Kubota1,2, Y. Tamura3,4, M. Ishijima1,2,3, 1Dept. of Orthopaedics, Juntendo Univ., Faculty of Med., Tokyo, Japan, 2Dept. of Med. for Orthopaedics and Motor Organ, Juntendo Univ. Graduate Sch. of Med., Tokyo, Japan, 3Sportology Ctr., Juntendo Univ. Graduate Sch. of Med., Tokyo, Japan, 4Dept. of Metabolism & Endocrinology, Juntendo Univ., Graduate Sch. of Med., Tokyo, Japan
- 139 ASSOCIATIONS BETWEEN COMMON CONCOMITANT DRUG USE AND STRUCTURAL PROGRESSION IN PATIENTS WITH KNEE OSTEOARTHRITIS: A RETROSPECTIVE ANALYSIS OF TWO PHASE 3 CLINICAL TRIALS J. W. Christensen, A. R. Bihlet, C. P. Miller, I. Byrjalsen, J. R. Andersen, M. A. Karsdal, NBCD, Herlev, Denmark
- 140 CAVIPA: SURVEY ON THE PERCEPTION OF QUALITY OF LIFE OF PATIENTS WITH OSTEOARTHRITIS IN SPAIN J. Vergés, N. Martínez, OAFI, Barcelona, Spain
- 141 THE VALIDITY OF THE BRIEF ILLNESS PERCEPTION QUESTIONNAIRE IN PEOPLE WITH KNEE PAIN; A RASCH ANALYSIS E. Ginnerup-Nielsen, E. Bandak1,2, C. Bartholdy1, M. Henriksen1, E. Ejlersen Wæhrens1,3, 1The Parker Inst., Bispebjerg and Frederiksberg Hosp., Copenhagen, Denmark, 2Univ. of Copenhagen, Copenhagen, Denmark, 3Dept. of Publ. Hlth., Univ. of Southern Denmark, Odense, Denmark

142	THE ASSOCIATION BETWEEN RADIOGRAPHIC FEATURES AND HIP PAIN: A WITHIN-PERSON ANALYSIS BASED ON DATA FROM THE CHECK COHORT	R. C. van Riet, Q. Wang, E. M. Macri, S. M.A. Bierma-Zeinstra, J. Runhaar, Erasmus Med. center, Rotterdam, Netherlands
143	KNEE OSTEOARTHRITIS, SARCOPENIA AND OVERWEIGHT: ARE THEY ASSOCIATED WITH THE 30-SECOND CHAIR STAND TEST?	P. J. Venturini, J. B. Aily, N. A. Casonato, S. M. Mattiello, Federal Univ. of São Carlos, Sao Carlos, Brazil
144	TRANSLATION AND VALIDATION OF A NORWEGIAN VERSION OF THE SATISFACTION MEASURE FOR USE IN PATIENT UNDERGOING TOTAL JOINT ARTHROPLASTY	I. Buset Bergvad ² , M. Falch Lindberg ^{1,2} , A. Kottorp ³ , S. Thorgaard Skou ^{4,5} , A. Lerdal ^{1,2} , ¹ Lovisenberg Diaconal Hosp., Oslo, Norway, ² Univ. of Oslo, Oslo, Norway, ³ Malmö Univ., Malmö, Sweden, ⁴ Univ. of Southern Denmark, Odense, Denmark, ⁵ Naestved-Slagelse-Ringsted Hosp., Slagelse, Denmark
145	RADIOGRAPHIC PROGRESSION OF HAND OSTEOARTHRITIS OVER 2 YEARS: THE HOSTAS COHORT	C. van der Meulen, L. A. van de Stadt, S. van Beest, F. R. Rosendaal, M. Kloppenburg, LUMC, Leiden, Netherlands
146	HOW SHOULD WE BEST MEASURE PARTICIPANT-REPORTED 'AVERAGE HAND PAIN': COMPARISON OF TWO METHODS FROM A RANDOMIZED PLACEBO-CONTROLLED FEASIBILITY STUDY OF POST-MENOPAUSAL WOMEN WITH HAND OSTEOARTHRITIS	J. A. Williams ¹ , M. Chester-Jones ¹ , A. Francis ¹ , G. Brewer ¹ , M. Gulati ¹ , C. Minns Lowe ² , K. Barker ² , P. Julier ¹ , V. Barber ¹ , K. Vincent ¹ , S. J. Dutton ¹ , F. E. Watt ³ , ¹ Univ. of Oxford, Oxford, United Kingdom, ² Oxford Univ. Hosp. NHS Fndn. Trust, Oxford, United Kingdom, ³ Imperial Coll. London, London, United Kingdom
147	HOW MUCH DOES THE PERCENTAGE OF FAT AND LEAN MASS DETERMINE THE MUSCLE STRENGTH OF THE QUADRICEPS EXTENSORS IN KNEE OSTEOARTHRITIS?	F. Sette, P. Venturini, N. Casonato, M. Gyaraki, J. Aily, S. Mattiello, Univ.e Federal de São Carlos, São Carlos, Brazil
148	A PHASE 2, 104-WEEK STUDY OF REPEAT LORECEVIVINT INJECTIONS EVALUATING SAFETY, EFFICACY, AND BONE HEALTH UTILIZING QUANTITATIVE COMPUTED TOMOGRAPHY IN KNEE OSTEOARTHRITIS (OA-06)	Y. Yazici ^{1,2} , C. Swearingen ¹ , H. Ghandehari ¹ , J. Britt ¹ , S. Kennedy ¹ , J. Tambiah ¹ , N. E. Lane, ¹ Biosplice Therapeutics, San Diego, CA, ² NYU Grossman Sch. of Med., New York, NY
149	SAFETY AND EFFICACY RESULTS FROM A PHASE 1 CLINICAL TRIAL OF PTP-001, AN INJECTABLE PLACENTAL TISSUE BIOLOGIC FOR KNEE OSTEOARTHRITIS	A. Amendola ¹ , S. M. Patel ² , D. Sullivan ³ , V. Strand ⁴ , M. K. Kottke ³ , A. Pavesio ³ , C. R. Flannery ³ , ¹ Duke Sports Sci. Inst., Durham, NC, ² Coastal Carolina Res. Ctr., North Charleston, SC, ³ Bioventus, Durham, NC, ⁴ Stanford Univ., Palo Alto, CA
150	A PLACEBO-CONTROLLED, SINGLE-BLIND EXTENSION STUDY EVALUATING THE SAFETY AND EFFICACY OF LORECEVIVINT IN SUBJECTS WITH STRUCTURALLY ADVANCED OSTEOARTHRITIS OF THE KNEE (OA-07): RADIOGRAPHIC AND PAIN OUTCOMES AT 24 AND 30 MONTH	Y. Yazici ^{1,2} , C. J. Swearingen ¹ , V. Lopez ¹ , J. Britt ¹ , S. Kennedy ¹ , J. Tambiah ¹ , T. McAlindon, ¹ Biosplice Therapeutics, San Diego, CA, ² NYU Grossman Sch. of Med., New York, NY
151	AGE, BODY MASS, SARCOPENIA, PAIN AND KINESIOPHOBIA: WHICH FACTORS ARE MOST ASSOCIATED WITH GAIT SPEED IN PEOPLE WITH KNEE OSTEOARTHRITIS?	P. J. Venturini, J. B. Aily, A. C. Almeida, S. M. Mattiello, Federal Univ. of São Carlos, Sao Carlos, Brazil
152	CLINICAL CHANGES IN KNEE OSTEOARTHRITIS (KOA) PATIENTS EXPOSED TO AN ANTI-INFLAMMATORY (ITIS)-DIET	M. Sala-Climent, R. Coras ¹ , M. Cedeno ¹ , J. Murilla-Saich ¹ , A. Quan ² , M. Kalli Hose ² , N. E Lane ¹ , M. Guma ² , ¹ Univ. of California San Diego, La Jolla, CA, ² San Diego VA Hlth.care, San Diego, CA
153	DOES AN IMPROVEMENT IN PAIN AND FUNCTION SCORES MEAN A SUCCESSFUL OUTCOME AFTER ARTHROSCOPIC PARTIAL MENISCECTOMY?	T. Harvey ¹ , N. Obuchowski ¹ , M. H. Jones ² , K. P. Spindler ³ , N. Subhas ¹ , ¹ Cleveland Clinic, Cleveland, OH, ² Brigham and Women's Hosp., Boston, MA, ³ Cleveland Clinic, Weston, FL
154	ACCOUNTING FOR THE HIGH REDUCTION OF POWER DUE TO FLOOR EFFECT IN DESIGN OF RANDOMIZED CONTROLLED TRIALS	A. Ooghe, S. Branders, J. Paul, A. Pereira, Cognivia s.a., Mont-Saint-Guibert, Belgium
155	TIBIAL PLATEAU SURFACE AREA IN SURGICAL DECISION FOR OSTEOARTHRITIC KNEES	W. Wang, T. Jiang ¹ , J. Zhang ¹ , L. Chan ¹ , P. Chan ² , C. Wen ¹ , ¹ The Hong Kong Polytechnical Univ., Hong Kong SAR, China, ² The Univ. of Hong Kong, Hong Kong SAR, China

- 156 PREVALENCE OF CARDIOVASCULAR RISK FACTORS IN COMMUNITY-BASED ADULTS WITH KNEE OSTEOARTHRITIS AND LOW BACK PAIN Y. Lim, J. Santos-Asscher, Y. Wang, M. Herson, D. Urquhart, A. Wluka, F. Cicuttini, Monash Univ., Melbourne, Australia
- 157 OPEN WEDGEHIGH TIBIAL OSTEOTOMY (OWHTO)CONTRIBUTESPOST-OPERATIVEGOOD CLINICAL RESULTS FOR PATIENTS WITH KNEE OSTEOARTHRITIS UP TO GRADE 3 OF KELLGREN-LAWRENCE CLASSIFICATION M. Kubota, H. Kaneko, Y. Kim, K. Yoshida, K. Kobayashi, J. Tomura, S. Wakana, J. Shiozawa, S. Hada, Y. Saita, M. Ishijima, Juntendo Univ., Faculty of Med., Tokyo, Japan
- 158 PRELIMINARY RESULTS OF THE STOP OSTEOARTHRITIS (SOAR) PROOF-OF-CONCEPT RANDOMIZED DELAY-CONTROLLED TRIAL J. M. Losciale,2, L. K. Truong1,2, K. Zhang2, T. Silvester-Lee2, M. Miciak3, A. Pajkic3, C. Y. Le3,2, A. M. Hoens1,2, A. Mosewich3, M. A. Hunt1, L. C. Li1,2, E. M. Roos4, J. Whittaker1,2, 1Univ. of British Columbia, Vancouver, BC, Canada, 2Arthritis Res. Canada, Vancouver, BC, Canada, 3Univ. of Alberta, Edmonton, AB, Canada, 4Univ. of Southern Denmark, Odense, Denmark
- 159 FUNCTIONAL PERFORMANCE OF RUNNERS AT RISK OF POST-TRAUMATIC KNEE OSTEOARTHRITIS: LIMB DIFFERENCES AND RELATIONSHIP WITH PAIN AND CONFIDENCE B. Mentiplay, M. Girdwood, R. Johnston, D. De Oliveira Silva, A. Culvenor, M. Haberfield, T. West, G. F. Telles, K. Crossley, La Trobe Univ., Melbourne, Australia
- 160 CHANGING PERCEPTIONS OF KNEE HEALTH SELF-MANAGEMENT WITH A VIRTUAL, EDUCATION, ACTION PLANNING AND EXERCISE PROGRAM IN PEOPLE AT RISK OF POST-TRAUMATIC OSTEOARTHRITIS L. K. Truong,2, J. Losciale1,2, K. Zhang2, E. M. Roos3, L. C. Li1,2, J. L. Whittaker1,2, 1Univ. of British Columbia, Vancouver, BC, Canada, 2Arthritis Res. Canada, Vancouver, BC, Canada, 3Univ. of Southern Denmark, Odense, Denmark
- 161 SEX/GENDER DISPARITY EXISTS IN ACTIVITY AND KNEE- RELATED AMONG YOUNG ADULTS AT RISK OF KNEE OA. A SYSTEMATIC REVIEW AND META-ANALYSIS OF 124,157 A. M. Bruder, A. G. Culvenor1, M. G. King1, M. J. Haberfield1, E. A. Roughead1, J. Mastwyk1, J. L. Kemp1, M. F. Pazzinatto1, T. J. West1, S. L. Coburn1, S. M. Cowan1, A. M. Ezzat1, L. K. To1, K. Chilman1, J. Couch1, J. L. Whittaker2, K. M. Crossley1, 1La Trobe Univ., Bundoora, Australia, 2Univ. of British Columbia, Vancouver, BC, Canada
- 162 DEFINING EARLY-STAGE KNEE OSTEOARTHRITIS: A SCOPING REVIEW J. Liew, L. K. King2, A. Mahmoudian3, Q. Wang4, D. B. Flynn1, T. Appleton5, M. Englund3, I. K. Haugen6, S. Lohmander3, J. Runhaar4, T. Neogi1, G. Hawker2, 1Boston Univ., Boston, MA, 2Univ. of Toronto, Toronto, ON, Canada, 3Lund Univ., Lund, Sweden, 4Erasmus Univ. Med. Ctr., Rotterdam, Netherlands, 5Univ. of Western Ontario, London, ON, Canada, 6Diakonhjemmet Hosp., Oslo, Norway
- 163 A NOVEL NON-SURGICAL BRACING PROTOCOL MAY FACILITATE HEALING OF ANTERIOR CRUCIATE LIGAMENT RUPTURE AND IMPROVE CLINICAL OUTCOMES S. R. Filbay, M. Dowsett2, M. Chaker Jomaa3, J. Rooney4, R. Sabharwal5, P. Lucas5, A. Van Den Heever5, J. Kazaglis6, J. Merlino6, M. Moran6, M. Allwright7, D. Kuah8, R. Durie9, G. Roger10, M. Cross11, T. Cross11, 1Univ. of Melbourne, Melbourne, Australia, 2Univ. of Notre Dame, Sydney, Australia, 3The Univ. of Sydney, Sydney, Australia, 4Lifecare Prahran Sports Med. Ctr., Melbourne, Australia, 5PRP Diagnostic Imaging, Sydney, Australia, 6Stadium Sports Physiotherapy, Sydney, Australia, 7Northern Beaches Hosp., Sydney, Australia, 8Sydney Sports Med. Ctr., Sydney, Australia, 9Aorangi Specialist Ctr., Palmerston North, New Zealand, 10Univ. of Sydney, Sydney, Australia, 11The Stadium Clinic, Sydney, Australia
- 164 ASSOCIATIONS BETWEEN MUSCLE FUNCTION AND EARLY SIGNS OF KNEE OSTEOARTHRITIS AFTER ANTERIOR CRUCIATE LIGAMENT RECONSTRUCTION: PRELIMINARY CROSS-SECTIONAL DATA FROM THE SHIELD STUDY A. Cronström, M. Risberg2, M. Englund1, C. Tiderius1, P. Peterson1, S. Månsson1, P. Neuman1, D. Strauss2, E. Ageberg1, 1Lund Univ., Lund, Sweden, 2Norwegian Sch. of Sport Sci., Oslo, Norway
- 165 SPORT AND PHYSICAL ACTIVITY PARTICIPATION IN YOUNG ADULTS AT RISK OF POST-TRAUMATIC OSTEOARTHRITIS AFTER ANTERIOR CRUCIATE LIGAMENT INJURY A. Culvenor, T. West1, A. Bruder1, M. Girdwood1, C. Barton1, M. Scholes1, L. To1, M. Haberfield1, J. Couch1, S. Evans1, E. Roos2, K. Crossley1, 1La Trobe Univ., Melbourne, Australia, 2Univ. of Southern Denmark, Odense, Denmark

- 166 PATIENTS' LIVED EXPERIENCES OF KNEE INJURY TREATMENT USING INTEGRATED PSYCHOLOGICAL TRAINING OR CARE-AS-USUAL: A PHENOMENOLOGICAL INTERVIEW STUDY N. Cederström, E. Ageberg, S. Granér, Lund Univ., Lund, Sweden
- 167 UNLOADING PRIOR TO SURGICAL RESTABILIZATION AFTER ACL RUPTURE SLOWS POST-TRAUMATIC OSTEOARTHRITIS PROGRESSION IN MICE Y-Y. Lin, E. Jbeily, C. Lee, B. Christiansen, UC Davis Hlth., Sacramento, CA
- 168 A SELF-ADMINISTRABLE AND INTERPRETABLE MACHINE-LEARNING-DRIVEN KNEE OSTEOARTHRITIS PROGNOSTIC MODEL FOR EARLY DIAGNOSIS AND INDIVIDUALISED TREATMENT H. Li1,2, L. Chan, P. Chan3, C. Wen1, 1The Hong Kong Polytechnic Univ., Hung Hom, Hong Kong, 2Tuen Mun Hosp., Tuen Mun, Hong Kong, 3The Univ. of Hong Kong, Pok Fu Lam, Hong Kong
- 169 ENLARGEMENT OF MEDIAL MENISCAL EXTRUSION INCREASES A RISK FOR INCIDENCE OF EARLY STAGE KNEE OSTEOARTHRITIS -SIX-YEAR LONGITUDINAL STUDY USING DATA FROM OSTEOARTHRITIS INITIATIVE (OAI) K. KOBAYASHI, H. KANEKO1,2, T. AOKI1, A. ADILI1,2,2, L. LIU1,2, Y. NEGISHI1, J. TOMURA1,2, S. WAKANA1,2, J. SHIOZAWA1, Y. KIM1, S. HADA1, M. KUBOTA1,2, M. ISHIJIMA1,2,2, 1Juntendo Univ., Tokyo, Japan, 2Juntendo Univ. Graduate Sch. of Med., Tokyo, Japan
- 170 GENETIC AND PHARMACOLOGICAL MANIPULATION OF STAT3 CHANGES THE EPIGENETIC AGE IN ARTICULAR CHONDROCYTE DEVELOPMENT AND DISEASE D. Evseenko, N. Q. Liu1, J. Ernst2, S. Horvath3, 1Univ. of Southern California, Los Angeles, CA, 2Univ. of California Los Angeles, Los Angeles, CA, 3Univ. of California Los Angeles, Los Angeles, CA
- 171 "YOU DON'T PUT IT DOWN TO ARTHRITIS": QUALITATIVE ANALYSIS OF THE FIRST SYMPTOMS RECALLED BY INDIVIDUALS WITH KNEE OSTEOARTHRITIS L. K. King, A. Mahmoudian2, E. J. Waugh1, C. MacKay1, I. Stanaitis3, J. W. Liew4, Q. Wang5, A. Turkiewicz6, I. K. Haugen7, C. T. Appleton8, S. Lohmander6, M. Englund6, J. Runhaar5, T. Neogi4, G. A. Hawker1, 1Univ. of Toronto, Toronto, ON, Canada, 2Univ. of West Florida, Pensacola, FL, 3Women's Coll. Hosp., Toronto, ON, Canada, 4Boston Univ., Boston, MA, 5Erasmus MC Univ. Med. Ctr., Rotterdam, Netherlands, 6Lund Univ., Lund, Sweden, 7Univ. of Oslo, Oslo, Norway, 8Western Univ., London, ON, Canada
- 172 MEDIAL PLICA INCREASES RISK FOR PROGRESSION OF MEDIAL MENISCUS EXTRUSION AND OSTEOPHYTE DEVELOPMENT IN MIDDLE-AGED POPULATIONS WITH KELLGREN-LAWRENCE CLASSIFICATION GRADE 0 -DATA FROM OSTEOARTHRITIS INITIATIVE (OAI) S. HADA, H. KANEKO, A. ADILI, L. LIU, J. TOMURA, S. WAKANA, J. SHIOZAWA, Y. KIM, K. KOBAYASHI, M. KUBOTA, M. ISHIJIMA, Juntendo Univ., Faculty of Med., Tokyo, Japan
- 173 VALIDATION OF AN ARTIFICIAL INTELLIGENCE SYSTEM TO ASSESS POSTURAL ORIENTATION DURING A SINGLE-LEG SQUAT J. Älmqvist Nae, M. Banega1,2, F. Kronström3, A. Jakobsson1, M. W. Creaby4, E. Ageberg1, 1Lund Univ., Lund, Sweden, 2Drottshälsan, Lund, Sweden, 3Chalmers Univ. of Technology, Gothenburg, Sweden, 4Australian Catholic Univ., Brisbane, Australia
- 174 ASSOCIATION BETWEEN HIP MUSCLE FUNCTION AND HIP-SPECIFIC PATIENT-REPORTED OUTCOMES IN PATIENTS WITH LONGSTANDING PRE-ARTHRITIC HIP AND GROIN PAIN A. Pålsson, J. Älmqvist Nae, Dept. of Hlth.Sci., Lund Univ., Lund, Sweden
- 175 ROLE OF FEMALE HORMONES ON CARTILAGE DEGENERATION AND PIEZO2 EXPRESSION IN KNEE JOINTS. T. Kojima,2, S. Kawabata1, H. Terada1,3, C. Takasu1, K. Takeshita1, N. Kanemura4, K. Murata4, Saitama Prefectural University, Sannomiya820, Koshigaya city, Saitama, Japan, 1Saitama Prefectural Univ., Sannomiya 820, Koshigaya city, Saitama, Japan, 2Soka Orthopedics and Internal Med., Chuuou1-1-18, Souka city, Saitama, Japan, 3Yatsuka Orthopedics and Internal Med., Yatuka1-20-20, Souka city, Saitama, Japan, 4Saitama Prefectural Univ. Dept. of Physical Therapy, Sannomiya 820, Koshigaya city, Saitama, Japan
- 176 PRECLINICAL RHEUMATOID ARTHRITIS AND ITS RELATIONSHIP WITH CHANGES IN THIGH MUSCLE QUALITY K. Moradi1, B. Mohajer1, F. W. Roemer2, A. Guerhazi2, S. Demehri, 1Johns Hopkins Univ. Sch. of Med., Baltimore, MD, 2Boston Univ. Sch. of Med., Boston, MA

- 177 IMPACTS OF COVID-19 HEALTH OUTCOMES ON PATIENTS WITH OSTEOARTHRITIS OR RHEUMATOID ARTHRITIS: A POPULATION-BASED STUDY H. D. Shan, B. W. Gelfand², K. A. Kalam¹, S. R. Mitchell³, C. D. Benedict³, M. W. Kessler², ¹Georgetown Univ. Sch. of Med., Washington DC, DC, ²Dept. of Orthopaedic Surgery, Medstar Georgetown Univ. Hosp., Washington DC, DC, ³Dept. of Rheumatology, Medstar Georgetown Univ. Hosp., Washington DC, DC
- 178 TARGETING HEMOPROTEINS WITH CARBON MONOXIDE PREVENTS HYPEROXIA-INDUCED CARTILAGE INJURY S. Liman, P. N. Kluz², P. C. Gomez-Contreras¹, M. R. Hines¹, E. L. Femino¹, M. Y. Sakyi¹, J. D. Byrne¹, J. E. Goetz¹, M. C. Coleman¹, ¹The Univ. of Iowa, Iowa City, IA, ²The Univ. of Wisconsin - Madison, Madison, WI
- 179 ASSOCIATION OF BASELINE KNEE CREPITUS WITH TIBIOFEMORAL OSTEOARTHRITIS DEVELOPMENT IN PATIENTS WITH KNEE SYMPTOMS BUT NO OR MINIMAL RADIOGRAPHIC OSTEOARTHRITIS OF THE KNEE A. Mahmoudian², L. S. Lohmänder¹, G. Hawker³, T. Neogi⁴, M. Englund¹, ¹Lund Univ., Lund, Sweden, ²Univ. of West Florida, Pensacola, FL, ³Univ. of Toronto, Toronto, ON, Canada, ⁴Boston Univ., Boston, MA
- 180 CANDIDATE ITEMS FOR CLASSIFYING EARLY-STAGE KNEE OSTEOARTHRITIS: RESULTS FROM AN INTERNATIONAL EXPERT SURVEY A. Mahmoudian², L. K. King³, J. W. Liew⁴, Q. Wang⁵, C. T. Appleton⁶, M. Englund¹, I. K. Haugen⁷, L. S. Lohmänder¹, J. Runhaar⁵, A. Turkiewicz¹, T. Neogi⁴, G. Hawker³, ¹Lund Univ., Lund, Sweden, ²Univ. of West Florida, Pensacola, FL, ³Univ. of Toronto, Toronto, ON, Canada, ⁴Boston Univ., Boston, MA, ⁵Erasmus MC Univ. Med. Ctr. Rotterdam, Rotterdam, Netherlands, ⁶The Univ. of Western Ontario, London, ON, Canada, ⁷Diakonhjemmet Hosp., Oslo, Norway
- 181 MURINE POST TRAUMATIC OSTEOARTHRITIS DOES NOT STRONGLY IMPACT GUT MICROBIOME COMMUNITY STRUCTURE, BUT SIGNIFICANTLY ALTERS THE FUNCTIONAL OUTPUT OF RESIDENT TAXA D. A. Villani, T. Ishii¹, H. Hendesi¹, S. H. Landgrave¹, A. Gill², L. Brenner³, L. Favazzo¹, S. R. Gill², M. Zuscik¹, ¹Univ. of Colorado Anschutz Med. Campus, Aurora, CO, ²Univ. of Rochester Med. Ctr., Rochester, NY, ³Rocky Mountain Regional VA Med. Ctr., Denver, CO
- 182 KINESIOPHOBIA AND KNEE SELF-EFFICACY BEFORE AND AFTER A NEUROMUSCULAR TRAINING INTERVENTION AMONG YOUNG ADULTS WITH HISTORY OF KNEE INJURY A. M. Räsänen, J. L. Whittaker², C. M. Toomey³, L. C. Benson⁴, K. Pasanen⁴, C. A. Emery⁴, ¹Western Univ. of Hlth.Sci., Lebanon, OR, ²Univ. of British Columbia, Vancouver, BC, Canada, ³Univ. of Limerick, Limerick, Ireland, ⁴Univ. of Calgary, Calgary, AB, Canada
- 183 ALBUMIN-HITCHHIKING MMP13 SIRNA CONJUGATE (SIMMP13^{-(EG18L)2}) FOR THE TREATMENT OF RHEUMATIC DISEASE J. M. Colazo, E. Hoogenboezem¹, F. Yu¹, V. Shah¹, J. Lo¹, H. Cho², L. Crofford¹, K. Hasty², C. Duvall¹, ¹Vanderbilt, Nashville, TN, ²UTHSC, Memphis, TN
- 184 THE EFFICACY OF ACUPUNCTURE COMBINED WITH MESENCHYMAL STEM CELL INJECTION IN THE TREATMENT OF OSTEOARTHRITIS OF THE KNEE Y. Li, Sr., B. Dong, Sr., P. Yuan, Sr., D. Liu, Sr., W. Kang, Sr., Shaanxi Univ. of Chinese Med., Xian Yang, China
- 185 ORAL DELIVERY OF DELTA-9-TETRAHYDROCANNABINOL PROVIDES SYMPTOM AND DISEASE MODIFICATION IN A MOUSE MODEL OF KNEE OSTEOARTHRITIS J. S. Rockel^{1,2}, A. Maglaviceanu^{2,3}, H. Fetter Filippini⁴, E. Wasilewski^{2,5}, M. M. Lewis-Bakker^{2,5}, S. Gabriel^{1,2}, E. Rossomacha^{1,2}, J. Garcia^{1,2}, T. Leroux^{1,2,5}, H. Clarke^{2,6}, R. P. Bonin⁴, L. P. Kotra^{2,4}, M. Kapoor^{1,2}, ¹Div. of Orthopaedics, Osteoarthritis Res. Program, Schroeder Arthritis Inst., Univ. Hlth.Network, Toronto, ON, Canada, ²Kreml Res. Inst., Univ. Hlth.Network, Toronto, ON, Canada, ³Dept. of Lab. Med. and Pathobiology, Univ. of Toronto, Toronto, ON, Canada, ⁴Leslie Dan Faculty of Pharmacy, Univ. of Toronto, Toronto, ON, Canada, ⁵Toronto Western Hosp., Univ. Hlth.Network, Toronto, ON, Canada, ⁶Dept. on Anesthesia and Pain Management, Toronto Gen. Hosp., Univ. Hlth.Network, Toronto, ON, Canada
- 186 INTRAARTICULAR INJECTION OF LIPOSOMES CONTAINING ADENOSINE PROVIDES SIGNIFICANT PAIN RELIEF, IMPROVEMENT IN FUNCTION AND COMFORTABLE RANGE OF MOTION, AND PREVENTS RADIOGRAPHIC PROGRESSION OF OSTEOARTHRITIS IN A PRECLINICAL CANINE MODEL D. Li, B. N. Cronstein², J. L. Cook³, C. C. Bozynski³, S. R. Angle¹, ¹Regenosine, Inc., Princeton, NJ, ²New York Univ. Sch. of Med., New York, NY, ³Univ. of Missouri, Columbia, MO

187	ISOLATION AND CHARACTERIZATION OF SMALL EXTRACELLULAR VESICLES DERIVED FROM DIFFERENT CELL TYPES	M. FRAGA-LODEIRO, Sr., C. SANJURJO-RODRÍGUEZ, Sr., I. FERNÁNDEZ-ABELED0, Sr., S. RODRÍGUEZ-FERNÁNDEZ, I. FUENTES-BOQUETE, Sr., F. DE TORO-SANTOS, Sr., F. BLANCO-GARCÍA, Sr., S. DÍAZ PRADO, Sr., UNIVERSIDADE DA CORUÑA, A CORUÑA, Spain
188	JOINT LUBRICANTS AS DELIVERY METHODS FOR MULTIPOTENT STROMAL CELLS	K. Davis, M. Hamilton ² , L. Stehno-Bittel ³ , D. Bittel ¹ , M. Filla ¹ , ¹ Kansas City Univ., Kansas City, MO, ² Univ. of Kansas, Lawrence, KS, ³ Likarda, LLC., Kansas City, MO
189	POLY(AMIDO AMINE) NANOPARTICLES ENABLE MRNA DELIVERY INTO CELLS OF HUMAN CARTILAGINOUS TISSUES	K. A. Münzebrock, A. Pontes ² , F. Y. Ho ¹ , J. Garcia ¹ , J. Rip ² , L. Creemers ¹ , ¹ UMC Utrecht, Utrecht, Netherlands, ² Med Therapeutics BV, Leiden, Netherlands
190	AN EFFICIENT NON-VIRAL CRISPR-CAS9 GENOME EDITING STRATEGY FOR HUMAN CHONDROCYTES	S. Ponta, A. Bonato ¹ , M. Zenobi-Wong ¹ , G. Barreto ^{2,3} , ¹ ETH Zürich, Zürich, Switzerland, ² Univ. of Helsinki and Helsinki Univ. Hosp., Helsinki, Finland, ³ Aalto Univ., Espoo, Finland
191	KBP-336 ALLEVIATES PAIN IN A METABOLIC MODEL OF OSTEOARTHRITIS THROUGH THE CALCITONIN RECEPTOR	K. E. Mohamed, A. T. Larsen, S. Melander, M. Karsdal, K. Henriksen, Nordic BioSci., Herlev, Denmark
192	TARGETING OXIDATIVE STRESS AND MITOCHONDRIAL DYNAMICS TO REDUCE CARTILAGE DEGENERATION	Q. Xu, Y. Xu, P. Massey, S. Barton, Y. Dong, LSU Hlth.Sci. Ctr., Shreveport, LA
193	GENE THERAPIES IN OSTEOARTHRITIS: A SCOPING REVIEW.	M. Uebelhoer ¹ , C. Lambert ² , N. Durieux ² , K. Guse ³ , S. Plutzki ² , Y. Henrotin ² , ¹ Artialis SA, Liège, Belgium, ² Univ. of Liège, Liège, Belgium, ³ Genequine Biotherapeutics GmbH, Hamburg, Germany
194	HUMAN MESENCHYMAL STROMAL CELLS IMPROVE OSTEOCHONDRAL REPAIR IN A MOUSE MODEL	M. Seah, Univ. of Cambridge, Cambridge, United Kingdom
196	CELLULAR AND ACELLULAR CHARACTERISTICS OF BONE MARROW ASPIRATE CONCENTRATE (BMAC) THAT MODULATE BONE MARROW DERIVED MSC HEALTH AND FUNCTION	S. Hambricht ¹ , L. Koldewyn ² , C. Donner ² , R. Dregalla ² , J. Herrera ² , J. Donner ² , ¹ Hambricht Consulting, Vail, CO, ² Colorado Spine Inst., Johnstown, CO
197	OSTEOCHONDRAL TISSUE ENGINEERING FOR OSTEOARTHRITIS USING INFRAPATELLAR FAT-PAD DERIVED MESENCHYMAL STEM CELLS	H. Leung, C. Yan, B. Chan, The Univ. of Hong Kong, Hong Kong, Hong Kong
198	IN VITRO ASSESSMENT OF THE THERAPEUTIC POTENTIAL OF INDUCED PLURIPOTENT STEM CELL DERIVED MESENCHYMAL STROMAL CELLS	D. Creaven, J. Hunt, F. U. Bhatti, G. Shaw, F. Barry, J. Murphy, Univ. of Galway, Galway, Ireland
199	ADVANCES IN MESENCHYMAL STROMAL CELL TRANSPLANTATION: A CLINICALLY RELEVANT DELIVERY VEHICLE FOR CONTROLLED RELEASE INTO OSTEOARTHRITIC JOINTS	M. Hamilton, K. Davis ² , J. Wang ³ , L. Stehno-Bittel ⁴ , ¹ Univ. of Kansas, Lawrence, KS, ² Kansas City Univ., Kansas City, MO, ³ Univ. of Kansas Med. Ctr., Kansas City, KS, ⁴ Likarda, LLC, Kansas City, MO
200	THERAPEUTIC POTENTIAL OF BROWN ALGAE EXTRACTS IN OSTEOARTHRITIS TREATMENT: AN IN VITRO STUDY	C. Vaamonde Garcia, E. Capelo-Mera ¹ , N. Flórez-Fernández ² , M. Torres ² , R. Meijide-Falide ¹ , F. Blanco ¹ , H. Domínguez ² , ¹ Univ. of A Coruña, A Coruña, Spain, ² Univ. of Vigo, Ourense, Spain
201	RECONSTRUCTION OF THE INTRA-ARTICULAR ENVIRONMENT OF OSTEOARTHRITIS WITH A 3D CO-CULTURE SYSTEM OF OSTEOARTHRITIS PATIENT-DERIVED CELLS	J-Y. Ko ¹ , S-H. Park ¹ , G-I. Im ² , ¹ Dongguk Univ., Goyangsi, Gyeonggido, Korea, Republic of, ² Dongguk Univ. Ilsan Hosp., Goyangsi, Gyeonggido, Korea, Republic of
202	DISCOVERY OF GLUTATHIONE S-TRANSFERASE THETA 1 GENE THAT CAN PROMOTE OSTEOGENIC DIFFERENTIATION OF ADIPOSE STEM CELLS	E. Lee ¹ , J-Y. Moon ¹ , S-Y. Park ¹ , J-Y. Ko ¹ , G-I. Im ² , ¹ Res. Inst. of Convergence Life Sci., Goyang, Korea, Republic of, ² Dongguk Univ. Ilsan Hosp., Goyang, Korea, Republic of
203	UPSCALING MANUFACTURING OF HUMAN INDUCED PLURIPOTENT-DERIVED MESENCHYMAL STROMAL CELLS IN A 1-L BIOREACTOR SYSTEM	J. Hunt, G. Shaw, F. Barry, M. J. Murphy, REMEDI, Galway City, Ireland
204	INTEGRIN $\alpha 1$ -SELECTED MESENCHYMAL STEM CELL TREATMENT REDUCES THE DEVELOPMENT OF POST-TRAUMATIC OSTEOARTHRITIS IN AN EQUINE MODEL	C. Andersen, S. Jacobsen ¹ , K. Uvebrant ² , J. Griffin IV ³ , M. Walters ¹ , L. Berg ¹ , E. Lundgren-Åkerlund ² , C. Lindegaard ¹ , ¹ Faculty of Hlth.and Med. Sci., Copenhagen, Denmark, ² Xintela AB, Lund, Sweden, ³ Texas A&M Univ., College Station, TX

205	INCORPORATION OF GLYCOSAMINOGLYCANS REGULATES DIFFERENTIATION OF MESENCHYMAL STEM CELLS	X. Yang, B. P. Chan, The Univ. of Hong Kong, Hong Kong, Hong Kong
206	IS TREATING POST-MENOPAUSAL WOMEN WITH SYMPTOMATIC HAND OSTEOARTHRITIS WITH HORMONE REPLACEMENT THERAPY FEASIBLE?: RESULTS FROM THE HOPE-E RANDOMISED, PLACEBO-CONTROLLED FEASIBILITY STUDY	M. Chester-Jones ¹ , J. A. Williams ¹ , A. Francis ¹ , G. Brewer ² , I. R. Marian ¹ , C. Mackworth-Young ³ , V. Glover ⁴ , S. E. Lamb ¹ , T. Vincent ^{1,3} , K. Vincent ¹ , S. J. Dutton ¹ , F. E. Watt ^{2,1,3} , ¹ Univ. of Oxford, Oxford, United Kingdom, ² Imperial Coll. London, London, United Kingdom, ³ Imperial Coll. Hlth.care NHS Trust, London, United Kingdom, ⁴ White Horse Med. Practice, Faringdon, Oxfordshire, United Kingdom
207	ASSESSING ALLOGENEIC CHONDROPROGENITOR MANUFACTURE UNDER GOOD MANUFACTURING PRACTICE (GMP) SERUM FREE AND XENO-FREE CONDITIONS.	J. Perry ^{1,2} , C. H. Hulme ^{1,2} , L. Rix ^{1,2} , H. S. McCarthy ^{1,2} , T. Lan ^{1,2} , S. Roberts ¹ , M. Snow ^{*1,2} , K. T. Wright [*] *Joint Authors, ² ¹ Keele Univ., Keele, United Kingdom, ² Robert Jones and Agnes Hunt Orthopaedic Hosp., Oswestry, United Kingdom
208	SENOPROTECTIVE EFFECTS OF MESENCHYMAL STROMAL CELLS-DERIVED EXTRACELLULAR VESICLES IN OSTEOARTHRITIS	M. Maumus, Sr., G. Minani Bertolino, J. Boulestreau, M. Barron, C. Jorgensen, D. Noel, Sr., Inserm U1183, Montpellier, France
209	TRANSCUTANEOUS VAGAL NERVE STIMULATION REDUCES PAIN AND HISTOLOGICAL OSTEOARTHRITIS IN DESTABILIZATION OF THE MEDIAL MENISCAL MOUSE MODEL	M. Humphrey ² , S. Yadav ¹ , M. Niewiadomska ¹ , L. Morris ¹ , T. Connor ³ , J. Lumry ³ , S. South ³ , E. Prinz ³ , T. Griffin ^{3,2} , S. Stavrakis ¹ , M. Jeffries ^{3,2} , ¹ Univ. of Oklahoma Hlth.Sci. Ctr., Oklahoma City, OK, ² Oklahoma City VA Med. Ctr., Oklahoma City, OK, ³ Oklahoma Med. Res. Fndn., Oklahoma City, OK
210	INCREASED JOINT LOADING 1 MONTH AFTER PLATELET-RICH PLASMA TREATMENT OF KNEE OA IS ASSOCIATED WITH IMPROVED CLINICAL OUTCOMES 2 YEARS LATER	J. He ² , J. C. Erhart-Hledik ^{1,2} , C. R. Chu ^{1,2} , ¹ Stanford Univ., Stanford, CA, ² VA Palo Alto Hlth.Care System, Palo Alto, CA
211	MODULATION OF FIBROCARILAGE MATRIX CHARACTERISTICS BY TISSUE MECHANICAL TRAINING	E. Lee, S. Jang, J. Jeong, T. Oh, Kyung Hee Univ., Seoul, Korea, Republic of
212	REGENERATIVE POTENTIAL OF EXTRACELLULAR VESICLES FROM MULTIPLE SOURCES	J. Anderson ¹ , K. Riasat ¹ , V. James ² , M. J. Peffers, ¹ Univ. of Liverpool, Liverpool, United Kingdom, ² Univ. of Nottingham, Nottingham, United Kingdom
213	NEW THERAPEUTIC PEPTIDES TO TARGET SENESENCE IN OSTEOARTHRITIS	M. Varela-Eirín ² , I. López-Díaz ¹ , P. Carpintero-Fernández ¹ , A. Sánchez-Temprano ¹ , A. García-Yuste ¹ , S. Learte-Aymamí ³ , E. Pazos ⁴ , J. L. Mascareñas ³ , M. E. Vázquez ³ , J. R. Caeiro ⁵ , ¹ Inst. de Investigación Biomédica de A Coruña (INIBIC). Servizo Galego de Saúde (SERGAS). Univ.e da Coruña (UDC), A Coruña, Spain, ² European Res. Inst. for the Biology of Ageing (ERIBA), Univ. Med. Ctr. Groningen (UMCG), Univ. of Groningen (RUG), Groningen, Netherlands, ³ Centro Singular de Investigación en Química Biolóxica e Materiais Moleculares (CIQUS), Univ.e de Santiago de Compostela, Santiago de Compostela, Spain, ⁴ Facultade de Ciencias and Centro de Investigacións Científicas Avanzadas (CICA), Univ.e da Coruña (UDC), A Coruña, Spain, ⁵ Complexo Hosp.ario Univ.rio de Santiago de Compostela (CHUS). Univ.e de Santiago de Compostela (USC), Santiago de Compostela, Spain
214	IMPLICATIONS OF NICOTINAMIDE ADENINE DINUCLEOTIDE METABOLISM IN CARTILAGE DEGENERATION AND OSTEOARTHRITIS	I. Prasadam, Sr., Ctr. for BioMed. Technologies, Queensland Univ. of Technology, Queensland, Australia
215	THE PROJECTED BURDEN OF PRIMARY TOTAL SHOULDER REPLACEMENT SURGERY IN AUSTRALIA TO 2035	I. Ackerman, C. Fisher ¹ , R. Page ² , R. de Steiger ³ , S-E. Soh ¹ , ¹ Monash Univ., Melbourne, Australia, ² Barwon Hlth.and Deakin Univ., Geelong, Australia, ³ Epworth Hlth.Care and The Univ. of Melbourne, Melbourne, Australia
216	USE OF PRESCRIBED AND OVER-THE-COUNTER ORAL NON-STEROIDAL ANTI-INFLAMMATORY DRUGS IN PEOPLE UNDERGOING A FIRST-LINE INTERVENTION FOR HIP OR KNEE OSTEOARTHRITIS	A. Dell 'Isola, C. Hellberg, A. Turkiewicz, M. Englund, A. Kiadaliri, Clinical Epidemiology Unit, Lund, Sweden

217	THE ROAD TO TOTAL KNEE REPLACEMENT - HEALTHCARE USE PATTERN UP TO 10 YEARS BEFORE TKR IN SOUTHERN SWEDEN	A. Dell 'Isola, C. Hellberg ¹ , A. Turkiewicz ¹ , T. Appleyard ² , G. Thomas ² , D. Yu ² , G. Peat ³ , M. Englund ¹ , ¹ Lund Univ., Lund, Sweden, ² Keel Univ., Staffordshire, United Kingdom, ³ Sheffield Hallam Univ., Sheffield, United Kingdom
218	UNDERSTANDING THE ROLE OF ACTIVITY LIMITATIONS AND INSTRUMENTAL SUPPORTS IN CHANGES IN SOCIAL PARTICIPATION IN OSTEOARTHRITIS: A POPULATION-BASED STUDY	A. V. Perruccio, C. Yip, J. Power, M. Canizares, E. M. Badley, Schroeder Arthritis Inst., Univ. Hlth.Network, Toronto, ON, Canada
219	THE HERITABILITY OF OSTEOARTHRITIS COMPARED TO OTHER RHEUMATIC DISEASES	K. Magnusson ² , A. Turkiewicz ¹ , M. Englund ¹ , ¹ Lund Univ., Lund, Sweden, ² Norwegian Inst. of Publ. Hlth., Oslo, Norway
220	COMPARATIVE EFFECTIVENESS OF METFORMIN IN PREVENTING POSTTRAUMATIC KNEE OSTEOARTHRITIS	S. Jafarzadeh, C. E. Peloquin, D. T. Felson, Boston Univ. Sch. of Med., Boston, MA
221	JOINT SYMPTOMS ANOTHER RISK MARKER FOR LATER OSTEOARTHRITIS: A LONGITUDINAL POPULATION BASED STUDY OF KNEE OSTEOARTHRITIS INCIDENCE	E. M. Badley, J. M. Wilfong, A. V. Perruccio, Schroeder Arthritis Inst., Univ. Hlth.Network, Toronto, ON, Canada
222	RISK FACTORS FOR INCIDENT HAND OSTEOARTHRITIS DEPEND ON THE PRESENCE OF OSTEOARTHRITIS IN OTHER JOINTS: FINDINGS FROM THE CANADIAN LONGITUDINAL STUDY ON AGING	J. M. Wilfong, E. M. Badley, A. V. Perruccio, Schroeder Arthritis Inst., Univ. Hlth.Network, Toronto, ON, Canada
223	COST-EFFECTIVENESS OF A COMMUNITY-BASED DIET AND EXERCISE INTERVENTION IN PERSONS WITH KNEE OA AND OVERWEIGHT OR OBESITY: DATA FROM THE WE-CAN RANDOMIZED CLINICAL TRIAL	P. T. Kopp, A. C. Rogers ¹ , H. Yang ¹ , D. J. Hunter ² , J. N. Katz ¹ , A. D. Paltiel ³ , J. Newman ⁴ , P. DeVita ⁵ , R. Loeser ⁶ , G. Miller ⁴ , M. Lyles ⁷ , S. P. Messier ⁴ , E. Losina ¹ , ¹ Brigham and Women's Hosp., Boston, MA, ² Univ. of Sydney, Sydney, Australia, ³ Yale Sch. of Publ. Hlth., New Haven, CT, ⁴ Wake Forest Univ., Winston-Salem, NC, ⁵ East Carolina Univ., Greenville, NC, ⁶ Univ. of North Carolina Sch. of Med., Chapel Hill, NC, ⁷ Wake Forest Univ. Sch. of Med., Winston-Salem, NC
224	COST-UTILITY ANALYSIS: UNDERSTANDING THE ECONOMIC IMPACT OF SURGICAL NON-RESPONSE IN ORTHOPAEDIC HIP, KNEE AND SPINE SURGERY FOR OSTEOARTHRITIS	Y. R. Rampersaud, A. V. Perruccio ¹ , E. Collett ¹ , K. Sundararajan ¹ , L. Montoya ¹ , J. D. Power ¹ , M. Canizares ¹ , J. R. Davey ¹ , R. Gandhi ¹ , K. A. Syed ¹ , C. J. Veillette ¹ , P. C. Coyte ² , N. N. Mahomed ¹ , ¹ Univ. Hlth.Network, Toronto, ON, Canada, ² Univ. of Toronto, Toronto, ON, Canada
225	SUBCHONDRAL INSUFFICIENCY FRACTURE OF THE KNEE (SIFK) IN ELDERLIES: PREVALENCE AND ASSOCIATIONS WITH KNEE PAIN AND MENISCUS TEAR -THE BUNKYO HEALTH STUDY (BHS)	J. TOMURA ² , H. KANEKO ^{1,2} , L. LIU ^{1,3} , Y. NEGISHI ¹ , A. A DI LI ^{1,2,3} , S. WAKANA ^{1,2} , Y. MACHIYAMA ^{1,2} , T. YAMAMURA ^{1,2} , Y. TAMURA ^{3,4} , M. KUBOTA ^{1,2} , M. ISHIIJIMA ^{1,2,3} , ¹ Dept. of Orthopaedics, Juntendo Univ., Faculty of Med., Tokyo, Japan, ² Dept. of Med. for Orthopaedics and Motor Organ, Juntendo Univ. Graduate Sch. of Med., Tokyo, Japan, ³ Sportology Ctr., Juntendo Univ. Graduate Sch. of Med., Tokyo, Japan, ⁴ Dept. of Metabolism & Endocrinology, Juntendo Univ., Graduate Sch. of Med., Tokyo, Japan
226	PATTERNS AND IMPACTS OF PATIENT MIGRATION FOR PRIMARY KNEE ARTHROPLASTY IN CHINA: A NATIONAL RETROSPECTIVE STUDY	H. Long, C. Zeng ^{1,2,3,4} , H. Chen ⁵ , J. Wei ^{2,6} , Y. Wang ¹ , Y. Shi ⁷ , H. Wang ⁸ , D. Xie ^{1,2} , G. Lei ^{1,2,3,4} , ¹ Dept. of Orthopaedics, Xiangya Hosp., Central South Univ., Changsha, China, ² Hunan Key Lab. of Joint Degeneration and Injury, Changsha, China, ³ Hunan Engineering Res. Ctr. for Osteoarthritis, Changsha, China, ⁴ Natl. Clinical Res. Ctr. for Geriatric Disorders, Xiangya Hosp., Central South Univ., Changsha, China, ⁵ Tibet Autonomous Region People's Hosp., Lhasa, China, ⁶ Hlth.Management Ctr., Xiangya Hosp., Central South Univ., Changsha, China, ⁷ China Standard Med. Information Res. Ctr., Shenzhen, China, ⁸ Clinical Trial Unit, First Affiliated Hosp. of Sun Yat-Sen Univ., Guangzhou, China
227	ASSOCIATION OF KNEE MENISCUS VOLUME WITH OA RISK SINGLE NUCLEOTIDE POLYMORPHISMS IN AN OVERWEIGHT AND OBESE POPULATION	D. Xu, N. Hansson, J. Van Meurs, E. Oei, S. Bierma-Zeinstra, S. Klein, J. Runhaar, Erasmus MC Univ. Med. Ctr. Rotterdam, Rotterdam, Netherlands

- 228 EXERCISE HABITS IN ELDERLIES ARE ASSOCIATED WITH KNEE PAIN AND LOWER LIMB MUSCLE STRENGTH -THE BUNKYO HEALTH STUDY (BHS) Y. Machiyama², H. Kaneko^{1,2}, K. Koayashi¹, J. Tomura^{1,2}, A. Adili^{2,3}, S. Wakana^{1,2}, L. Liu^{1,3}, Y. Kim^{1,2}, M. Kubota^{1,2}, Y. Tamura^{3,4}, M. Ishijima^{1,2,3}, ¹Juntendo Univ., Faculty of Med., Tokyo, Japan, ²Dept. of Med. for Orthopaedics and Motor Organ, Juntendo Univ. Graduate Sch. of Med., Tokyo, Japan, Tokyo, Japan, ³Sportology Ctr., Juntendo Univ. Graduate Sch. of Med., Tokyo, Japan, ⁴Juntendo Univ., Graduate Sch. of Med., Tokyo, Japan
- 229 PSYCHOSOCIAL FACTORS ARE EFFECT MODIFIERS IN THE ASSOCIATION BETWEEN PAIN AND HEALTHCARE UTILIZATION IN PEOPLE WITH KNEE OSTEOARTHRITIS S. Modarresi, L. Carlesso, McMaster Univ., Hamilton, ON, Canada
- 230 COMPARISON OF MRI AND MR ARTHROGRAPHY FOR THE DETECTION OF SCAPHOLUNATE LIGAMENT INJURIES: A COST-EFFECTIVENESS ANALYSIS J. Luitjens, N. Hesse², J. Rübenthaler², R. Schmitt², F. Gassert¹, ¹UCSF, San Fransisco, CA, ²LMU Munich, Munich, Germany
- 231 ARTRO 360: NEW MANAGEMENT MODEL TO PROGRESS IN THE TREATMENT OF OSTEOARTHRITIS BY OPTIMIZING THE AVAILABLE RESOURCES. J. Vergés, N. Martínez, OAFI, Barcelona, Spain
- 232 ASSOCIATION BETWEEN WEIGHT GAIN AND KNEE OSTEOARTHRITIS: A SYSTEMATIC REVIEW AND META-ANALYSIS P. Solanki, S. M. Hussain, J. Abidi, J. Cheng, J. L. Fairley, M. J. Page, F. Cicuttini, A. E. Wluka, Monash Univ., Melbourne, Australia
- 233 IDENTIFICATION OF KNEE MRI EXAMINATIONS IN PATIENTS WITH OSTEOARTHRITIS USING ARTIFICIAL INTELLIGENCE IN A CONSECUTIVE CLINICAL COHORT A. Lenskjold, M. W. Brejnebo¹, J. U. Nybing¹, M. H. Rose², H. Gudbergesen³, A. Troelsen⁴, A. Moller⁵, M. Boesen¹, ¹Bispebjerg-Frederiksberg Hosp., Copenhagen, Denmark, ²Charlie Tango, Copenhagen, Denmark, ³The Parker Inst. & Ctr. for Res. and Ed. in Gen. Practice, Univ. of Copenhagen, Copenhagen, Denmark, ⁴Copenhagen Univ. Hosp. Hvidovre & CAG ROAD – Res. OsteoArthritis, Copenhagen, Denmark, ⁵Ctr. for Res. and Ed. in Gen. Practice, Univ. of Copenhagen, Copenhagen, Denmark
- 234 ACETABULAR DYSPLASIA IS A RISK FACTOR FOR DEVELOPING RADIOGRAPHIC HIP OSTEOARTHRITIS; DATA FROM THE WORLD COACH CONSORTIUM N. S. Riedstra, F. Boel¹, M. M. van Buuren¹, H. Ahedi², V. Arbabi³, N. Arden⁴, S. M. Bierma-Zeinstra¹, C. G. Boer¹, F. M. Cicuttini⁵, T. F. Cootes⁶, D. T. Felson⁷, W. P. Gielis³, S. Kluzek⁸, N. E. Lane⁹, C. Lindner¹⁰, J. Lynch¹¹, J. van Meurs¹, A. E. Nelson¹², M. C. Nevitt¹¹, E. H. Oei¹, J. Runhaar¹, T. D. Spector¹³, J. Tang¹, H. H. Weinans¹⁴, R. Agricola¹, ¹Erasmus Med. Ctr., Rotterdam, Netherlands, ²Univ. of Tasmania, Hobart, Australia, ³Univ. Med. Ctr. Utrecht, Utrecht, Netherlands, ⁴Univ. of Oxford, Oxford, United Kingdom, ⁵Monash Univ., Clayton, Australia, ⁶Manchester Univ., Manchester, United Kingdom, ⁷Boston Med. Ctr., Boston, MA, ⁸Univ. of Nottingham, Nottingham, United Kingdom, ⁹UC Davis, Davis, CA, ¹⁰Univ. of Manchester, Manchester, United Kingdom, ¹¹Univ. of California, San Francisco, San Francisco, CA, ¹²Univ. of North Carolina, Chapel Hill, NC, ¹³King's Coll. London, London, United Kingdom, ¹⁴Univeristy Med. Ctr. Utrecht, Utrecht, Netherlands
- 235 THE LONGITUDINAL ASSOCIATION OF HAND OSTEOARTHRITIS WITH PAID AND UNPAID WORK IMPAIRMENT AND RELATED COSTS: THE HAND OSTEOARTHRITIS IN SECONDARY CARE COHORT S. E. Terpstra, L. A. van de Stadt¹, A. E. Boonen², F. R. Rosendaal¹, M. Kloppenburg¹, ¹Leiden Univ. Med. Ctr., Leiden, Netherlands, ²Maastricht Univ. Med. Ctr., Maastricht, Netherlands

- 236 PINCER MORPHOLOGY IS A RISK FACTOR FOR DEVELOPING RADIOGRAPHIC HIP OSTEOARTHRITIS; DATA FROM THE WORLD COACH CONSORTIUM
N. S. Riedstra, M. M. Van Buuren¹, F. Boel¹, H. Ahedi², V. Arbabi³, N. Arden⁴, S. M. Bierma-Zeinstra¹, C. G. Boer¹, F. M. Cicuttini⁵, T. F. Cootes⁶, D. T. Felson⁷, W. P. Gielis³, S. Kluzek⁸, N. E. Lane⁹, C. Lindner⁶, J. Lynch¹⁰, J. van Meurs¹, A. E. Nelson¹¹, M. C. Nevitt¹⁰, E. H. Oei¹, J. Runhaar¹, T. D. Spector¹², J. Tang¹, H. H. Weinans³, R. Agricola¹, ¹Erasmus Med. Ctr., Rotterdam, Netherlands, ²Univ. of Tasmania, Hobart, Australia, ³Univ. Med. Ctr. Utrecht, Utrecht, Netherlands, ⁴Oxford Univ., Oxford, United Kingdom, ⁵Monash Univ., Clayton, Australia, ⁶Univ. of Manchester, Manchester, United Kingdom, ⁷Boston Med. Ctr., Boston, MA, ⁸Univ. of Nottingham, Nottingham, United Kingdom, ⁹UC Davis, Davis, CA, ¹⁰Univ. of California, San Francisco, San Francisco, CA, ¹¹Univ. of North Carolina, Chapel Hill, NC, ¹²King's Coll. London, London, United Kingdom
- 237 "SHORT QUESTIONNAIRE TO ASSESS HEALTH-ENHANCING PHYSICAL ACTIVITY" VERSUS ACTIHEART-MEASURED PHYSICAL ACTIVITY IN THE MIDDLE AGED GENERAL POPULATION: THE NETHERLANDS EPIDEMIOLOGY OF OBESITY STUDY
S. E. Terpstra, L. A. Hoogervorst, J. H. van der Velde, R. de Mutsert, L. A. van de Stadt, F. R. Rosendaal, M. Kloppenburg, Leiden Univ. Med. Ctr., Leiden, Netherlands
- 238 TRENDS IN OSTEOARTHRITIS PREVALENCE BY DEMOGRAPHIC, SOCIOECONOMIC, AND METABOLIC FACTORS IN THE UNITED STATES, 1999-2018
X. Fang, T. Fan¹, S. Chen¹, M. Zeng¹, P. Cao¹, D. J. Hunter^{1,2,3}, C. Ding^{1,4,5,6}, Z. Zhu¹, ¹Clinical Res. Ctr., Orthopedic Ctr., Zhujiang Hosp., Southern Med. Univ., Guangzhou, China, ²Dept. of Rheumatology, Royal North Shore Hosp., Univ. of Sydney, Sydney, Australia, ³Inst. of Bone and Joint Res., Kolling Inst., Univ. of Sydney, Sydney, Australia, ⁴Dept. of Rheumatology, Guangzhou First People's Hosp., Sch. of Med., South China Univ. of Technology, Guangzhou, China, ⁵Dept. of Orthopaedics, Affiliated Hosp. of Youjiang Med. Univ. for Natl.ities, Baise, China, ⁶Menzies Inst. for Med. Res., Univ. of Tasmania, Hobart, Australia
- 239 THE RELATIONSHIP BETWEEN CAM MORPHOLOGY AND DEVELOPMENT OF RADIOGRAPHIC HIP OSTEOARTHRITIS AT 2-, 5-, 8- AND 10-YEARS FOLLOW-UP: A NATIONWIDE PROSPECTIVE COHORT STUDY (CHECK)
J. Tang, M. M. van Buuren, N. S. Riedstra, J. Runhaar, F. D. Boel, S. M. Bierma-Zeinstra, R. Agricola, Erasmus Univ. Med. Ctr., Rotterdam, Netherlands
- 240 DEPRESSION AND TIME TO KNEE ARTHROPLASTY IN KNEE OSTEOARTHRITIS PATIENTS
S. C. Gebauer, J. Salas¹, J. F. Scherrer¹, L. F. Callahan², ¹Saint Louis Univ., Saint Louis, MO, ²Univ. of North Carolina, Chapel Hill, NC
- 241 ASSOCIATION OF HEALTHY LIFESTYLE, GENETIC SUSCEPTIBILITY AND INCIDENCE OF OSTEOARTHRITIS-A NATIONAL PROSPECTIVE COHORT STUDY
S. Chen¹, Y. Zhang¹, T. Fan¹, M. Zeng¹, J. Li¹, G. Ruan², P. Cao¹, Y. Zhang¹, X. Shi¹, H. Yang¹, Q. Yang³, C. Ding¹, Z. Zhu, ¹Southern Med. Univ., Guangzhou, China, ²Guangzhou First People's Hosp., Guangzhou, China, ³Univ. of Bristol, Bristol, United Kingdom
- 242 TRIRADIATE CARTILAGE ORIENTATION IS ASSOCIATED WITH ACETABULAR DYSPLASIA IN 9 YEAR OLDS
F. Boel, D. Chen¹, S. de Vos-Jakobs¹, N. S. Riedstra¹, C. Lindner², J. J. Tol¹, J. Runhaar¹, S. M. Bierma-Zeinstra¹, R. Agricola¹, ¹Erasmus Univ. Med. Ctr., Rotterdam, Netherlands, ²Univ. of Manchester, Manchester, United Kingdom
- 243 THE MAGNITUDE OF KNEE OSTEOARTHRITIS IN BENGHAZI MEDICAL CENTER, LIBYA
M. M. Alfadli, S. A. Lawgaly, H. Ihmaidat, H. Boshalla, A. Alhowty, Benghazi Med. Ctr., Faculty of Med., Univ. of Benghazi, Benghazi, Libyan Arab Jamahiriya
- 244 EPIDEMIOLOGY AND TREATMENT OF PAIN ASSOCIATED WITH OSTEOARTHRITIS OF THE KNEE IN GERMANY: A RETROSPECTIVE HEALTH CLAIMS DATA ANALYSIS
D. Beier¹, H. Liedgens², S. Ivanavicius³, J. Jerosch⁴, D. Häckl⁵, Ö. Sancak², ¹InGef - Inst. für angewandte Gesundheitsforschung Berlin GmbH, Berlin, Germany, ²Grunenthal, Aachen, Germany, ³Grunenthal, Maidenhead, United Kingdom, ⁴Medizinisches Wissenschafts- und Gutachten-Inst. Meerbusch,, Dusseldorf, Germany, ⁵WIG2, Leipzig, Germany
- 245 POOR PHYSICAL FUNCTION IS ASSOCIATED WITH MORTALITY AMONG INDIVIDUALS WITH KNEE AND/OR HIP OA: THE JOHNSTON COUNTY OSTEOARTHRITIS PROJECT
R. J. Cleveland, T. A. Schwartz, J. B. Renner, A. E. Nelson, Y. M. Golightly, L. F. Callahan, Univ. of North Carolina at Chapel Hill, Chapel Hill, NC

- 246 TANTALUM OXIDE NANOPARTICLES FOR CONTRAST-ENHANCED COMPUTED TOMOGRAPHY DIAGNOSIS OF OSTEOARTHRITIS J. Jäntti², A. Joenathan³, J. T. Honkanen², B. D. Snyder⁴, J. Töyräs^{1,2,5}, M. W. Grinstaff³, H. Matikka², J. T. Mäkelä^{1,2}, ¹Univ. of Eastern Finland, Kuopio, Finland, ²Kuopio Univ. Hosp., Kuopio, Finland, ³Boston Univ., Boston, MA, ⁴Boston Children's Hosp., Boston, MA, ⁵The Univ. of Queensland, Brisbane, Australia
- 247 TRIPLE CONTRAST COMPUTED TOMOGRAPHY REVEALS SITE-SPECIFIC DIFFERENCES IN HUMAN KNEE JOINT BIOMECHANICAL PROPERTIES H. Orava², P. Paakkari^{1,2}, J. Jäntti^{1,2}, M. K. Honkanen^{1,2}, J. T. Honkanen², T. Virén², P. Tanska¹, R. K. Korhonen¹, M. W. Grinstaff³, J. Töyräs^{1,2,4}, J. T. Mäkelä^{1,2}, ¹Univ. of Eastern Finland, Kuopio, Finland, ²Kuopio Univ. Hosp., Kuopio, Finland, ³Boston Univ., Boston, MA, ⁴The Univ. of Queensland, Brisbane, Australia
- 248 CROSS-SECTIONAL ASSOCIATIONS OF ULTRASOUND FEATURES AT THE KNEE WITH SEX, RACE, ETHNICITY, AND RADIOGRAPHIC OA: THE JOHNSTON COUNTY HEALTH STUDY C. Alvarez¹, L. Palomino¹, T. A. Schwartz¹, S. Savage-Guin¹, J. B. Renner¹, C. J. Bakewell², M. J. Kohler³, J. Lin⁴, J. Samuels⁵, A. E. Nelson, ¹Univ. of North Carolina, Chapel Hill, NC, ²Intermountain Hlth.Care, Salt Lake City, UT, ³Massachusetts Gen. Hosp./Harvard Med. Sch., Boston, MA, ⁴Stanford Hlth.Care, Palo Alto, CA, ⁵New York Univ. Langone Hlth., New York, NY
- 249 SYNOVITIS OF OSTEOARTHRITIS OF THE KNEE IS ASSOCIATED WITH BONE MARROW ABNORMALITY IN ELDERLIES -THE BUNKYO HEALTH STUDY J. SHIOZAWA², H. KANEKO^{1,2}, L. LIU^{1,3}, A. AREPATI^{1,3}, T. Aoki¹, J. TOMURA^{1,2}, S. WAKANA^{1,2}, k. KOBAYASHI¹, S. Hada¹, Y. KIM¹, Y. Machiyama^{1,2}, T. Yamamura^{1,2}, M. KUBOTA^{1,2}, M. Ishijima^{1,2,3}, ¹Dept. of Orthopaedics, Juntendo Univ., Faculty of Med., Tokyo, Japan, ²Dept. of Med. for Orthopaedics and Motor Organ, Juntendo Univ. Graduate Sch. of Med., Tokyo, Japan, ³Sportology Ctr., Juntendo Univ. Graduate Sch. of Med., Tokyo, Japan
- 250 SENSITIVITY OF AN AUTOMATED, U-NET-BASED SEGMENTATION PIPELINE TO DIFFERENCES IN LAMINAR CARTILAGE T2 TIMES BETWEEN KLG 0 KNEES WITH CONTRALATERAL JOINT SPACE NARROWING VS KLG 0 KNEES WITH CONTRALATERAL KLG 0 - ON BEHALF OF THE OA-BIO CONSORTIUM W. Wirth², A. Wisser^{1,2}, F. Roemer^{3,4}, F. Berenbaum^{5,6,7}, J. Kemnitz¹, G. Duda⁸, F. Eckstein^{1,2}, S. Maschek^{1,2}, ¹Paracelsus Med. Univ., Salzburg, Austria, ²Chondrometrics GmbH, Freilassing, Germany, ³Univ. of Erlangen, Erlangen, Germany, ⁴Boston Univ., Boston, MA, ⁵AP-HP Saint-Antoine Hosp., Paris, France, ⁶Sorbonne Univ., Paris, France, ⁷Moving Biotech, Lille, France, ⁸Charité - Univ.smedizin Berlin, Berlin, Germany
- 251 SENSITIVITY OF AN AUTOMATED, U-NET-BASED ANALYSIS PIPELINE TO ARTICULAR CARTILAGE SPIN-SPIN (T2) RELAXATION TIME DIFFERENCES IN KNEES WITH VS. THOSE WITHOUT CARTILAGE DAMAGE - ON BEHALF OF THE OA-BIO CONSORTIUM A. Wisser², F. Roemer^{3,4}, F. Berenbaum^{5,6,7}, J. Kemnitz¹, A. Guerhazi^{8,4}, G. Duda⁹, L. Sharma¹⁰, S. Maschek^{1,2}, F. Eckstein^{1,2}, W. Wirth^{1,2}, ¹Paracelsus Med. Univ., Salzburg, Austria, ²Chondrometrics GmbH, Freilassing, Germany, ³Univ. of Erlangen, Erlangen, Germany, ⁴Boston Univ., Boston, MA, ⁵AP-HP Saint-Antoine Hosp., Paris, France, ⁶Sorbonne Univ., Paris, France, ⁷Moving Biotech, Lille, France, ⁸VA Boston Hlth.care, Boston, MA, ⁹Charité - Univ.smedizin Berlin, Berlin, Germany, ¹⁰Northwestern Univ., Chicago, IL
- 252 IMAGING-BASED CHARACTERIZATION OF OA ENDOTYPES DERIVED FROM BIOCHEMICAL MARKERS - DATA FROM THE OBSERVATIONAL MULTICENTER APPROACH COHORT J. Bacardit¹, F. Roemer^{2,3}, M. Jansen⁴, S. Maschek⁵, A. Marijnissen⁴, S. C. Mastbergen⁴, A. Wisser^{5,6}, F. Lafeber⁴, A. Lalonde⁷, H. Weinans⁴, F. Blanco⁸, F. Berenbaum^{9,10}, L. A. van de Stadt¹¹, M. Kloppenburg¹¹, I. K. Haugen¹², C. Ladel¹³, A-C. C. Bay-Jensen¹⁴, Y. Henrotin^{15,16}, A. Struglics¹⁷, A. Mobasher¹⁸, F. Eckstein^{5,6}, W. Wirth^{5,6}, ¹Newcastle Univ., Newcastle, United Kingdom, ²Univ. of Erlangen, Erlangen, Germany, ³Boston Univ., Boston, MA, ⁴Univ. Utrecht, Utrecht, Netherlands, ⁵Paracelsus Med. Univ., Salzburg, Austria, ⁶Chondrometrics GmbH, Freilassing, Germany, ⁷Servier, Suresnes, France, ⁸INIBIC-Univ.e de A Coruña, A Coruña, Spain, ⁹Sorbonne Univ., Paris, France, ¹⁰AP-HP Saint-Antoine Hosp., Paris, France, ¹¹Leiden Univ. Med. Ctr., Leiden, Netherlands, ¹²Diakonhjemmet Hosp., Oslo, Norway, ¹³Independent Consultant, Darmstadt, Germany, ¹⁴Nordic BioSci., Herlev, Denmark, ¹⁵Artialis SA, Liège, Belgium, ¹⁶Univ. of Liège, Liège, Belgium, ¹⁷Lund Univ., Lund, Sweden, ¹⁸Univ. of Oulu, Oulu, Finland

- 253 ASSOCIATION OF QUANTITATIVE MEASURES OF MEDIAL MENISCUS EXTRUSION WITH STRUCTURAL AND SYMPTOMATIC KNEE OSTEOARTHRITIS PROGRESSION - DATA FROM THE OAI FNIH BIOMARKER STUDY K. Sharma,2, S. Maschek2,3, M. Roth4, D. J. Hunter5,6, F. Eckstein2,3, W. Wirth2,3, 1KATHMANDU Univ. SCHOOL OF Med. Sci.S, Dhulikhel, Nepal, 2Paracelsus Med. Univ., Salzburg, Austria, 3Chondrometrics GmbH, Freilassing, Germany, 4Salzburg Univ. of Applied Sci., Salzburg, Austria, 5Royal North Shore Hosp., Sydney, Australia, 6Univ. of Sydney, Sydney, Australia
- 254 BONE MARROW ABNORMALITIES ON LATERAL COMPARTMENT OF KNEE JOINT INCREASE RISK FOR INCIDENCE OF MEDIAL KNEE OSTEOARTHRITIS -DATA FROMOSTEOARTHRITIS INITIATIVE (OAI) Y. Kim, H. Kaneko1,2, A. Adili1,2,2, L. Liu1,2, T. Aoki1, J. Tomura1,2, S. Wakana1,2, J. Shiozawa1, K. Kobayashi1, S. Hada1, M. Kubota1, M. Ishijima1,2,2, 1Juntendo Univ., Faculty of Med., Tokyo, Japan, 2Juntendo Univ. Graduate Sch. of Med., Tokyo, Japan
- 255 FLUCTUATION IN BONE MARROW LESIONS AND INFLAMMATORY MRI MARKERS AND CONCURRENT ASSOCIATIONS WITH QUANTITATIVE CARTILAGE LOSS: DATA FROM THE IMI-APPROACH COHORT F. Roemer,2, M. P. Jansen3, S. Maschek4, A. C. Marijnissen3, A. Wissner5, R. Heiss1, F. P. Lafeber3, A. Lalonde6, S. Mastbergen7, H. H. Weinans3, F. J. Blanco8, F. Berenbaum9, M. Kloppenburg10, I. K. Haugen11, A. Guermazi12, F. Eckstein5, W. Wirth13, 1Univ.sklinikum Erlangen & Friedrich-Alexander Univ. Erlangen-Nürnberg (FAU), Erlangen, Germany, 2Boston Univ. Sch. of Med., Boston, MA, 3Univ. Med. Ctr. Utrecht, Utrecht, Netherlands, 4Chondrometrics, Freilassing, Germany, 5Paracelsus Med. Univ. & Chondrometrics GmbH, Salzburg, Austria & Freilassing, Germany, Austria, 6Inst. de Recherches Intl.es Servier, Suresnes, France, 7Univ. Med. Ctr. Utrecht, Utrecht, Germany, 8INIBIC- Univ.e de A Coruña, A Coruña, Spain, 9INSERM, Sorbonne Univ., Paris, France, 10Leiden Univ. Med. Ctr., Leiden, Netherlands, 11Diakonhjemmet Hosp., Oslo, Norway, 12VA Hlth.care System, West Roxbury, MA, 13Paracelsus Med. Univ. & Chondrometrics GmbH, Salzburg, Austria & Freilassing, Germany, Germany
- 256 ULTRAFast BIOMECHANICAL T₂ MAPPING OF KNEE ARTICULAR CARTILAGE USING A RADIAL TURBO-SPIN-ECHO SEQUENCE AT 3T- INITIAL RESULTS V. Janacova, V. Juras1, P. Szomolanyi1,2, D. Bencikova1, S. Trattng1,3,4,5, 1Med. Univ. of Vienna, Vienna, Austria, 2Inst. of Measurement Sci., Slovak Academy of Sci., Bratislava, Slovakia, 3CD Lab. for MR Imaging Biomarkers (BIOMAK), Vienna, Austria, 4Austrian Cluster for Tissue Regeneration, Ludwig Boltzmann Inst. for Experimental and Clinical Traumatology, Vienna, Austria, 5Inst. for Clinical Molecular MRI in the Musculoskeletal System, Karl Landsteiner Society, Vienna, Austria
- 257 DEVELOPMENT OF AN MRI-BASED DEFINITION OF KNEE OSTEOARTHRITIS: DATA FROM THE MULTICENTER OSTEOARTHRITIS STUDY J. Liew, G. Rabasa1, M. LaValley1, J. Collins2, J. Stefanik3, F. W. Roemer4, A. Guermazi1, C. E. Lewis5, M. Nevitt6, J. Torner7, D. Felson1, 1Boston Univ., Boston, MA, 2Brigham and Womens Hosp., Boston, MA, 3Northeastern Univ., Boston, MA, 4Univ. of Erlangen-Nuremberg, Erlangen, Germany, 5Univ. of Alabama Birmingham, Birmingham, AL, 6Univ. of California San Francisco, San Francisco, CA, 7Univ. of Iowa, Iowa City, IA
- 258 METABOLIC SYNDROME AND THE PROGRESSION OF KNEE OSTEOARTHRITIS ON MRI N. Jansen, E. Molendijk, D. Schiphof, J. van Meurs, E. Oei, M. van Middelkoop, S. Bierma-Zeinstra, Erasmuc MC, Rotterdam, Netherlands
- 259 CHONDROCALCINOSIS IS A RISK FACTOR FOR KNEE OSTEOARTHRITIS AND PAIN INCIDENCE Y. Wu, J. D. Boer, E. H. Oei, T. Voortman, J. B. Meurs, C. G. G. Boer, Erasmus Med. Ctr., Rotterdam, Netherlands
- 260 VALIDATION OF AUTOMATED PROGRAM TO SEGMENT FEMORAL ARTICULAR CARTILAGE IN ULTRASOUND IMAGES J. Stefanik, P. Corrigan2, M. Harkey3, J. Stefanik1, 1Northeastern Univ., Boston, MA, 2Saint Louis Univ., St. Louis, MO, 3Michigan State Univ., East Lansing, MI
- 261 COMPOUND EFFECTS OF BMI AND SUSTAINED DEPRESSIVE SYMPTOMS ON KNEE OSTEOARTHRITIS OVER 4 YEARS: DATA FROM THE OSTEOARTHRITIS INITIATIVE G. B. Joseph, C. E. McCulloch1, M. C. Nevitt1, J. Lynch1, N. E. Lane2, V. Pedroia1, S. Majumdar1, T. M. Link1, 1Univ. of California San Francisco, San Francisco, CA, 2Univ. of California Davis, San Francisco, CA

- 262 TANTALUM AND IODINE BASED DUAL-CONTRAST PHOTON-COUNTING COMPUTED TOMOGRAPHY METHOD FOR ASSESSMENT OF ARTICULAR CARTILAGE COMPOSITION P. Paakkari², S. I. Inkinen^{3,4}, J. Jäntti^{1,2}, J. Tuppurainen^{1,2}, M. C. Fugazzola⁵, A. Joenathan⁶, S. Ylisiurua^{4,7}, M. T. Nieminen⁴, M. W. Grinstaff⁶, H. Kröger², J. Töyräs^{1,2,8}, J. T. Honkanen², J. T. Mäkelä^{1,2}, ¹Univ. of Eastern Finland, Kuopio, Finland, ²Kuopio Univ. Hosp., Kuopio, Finland, ³Helsinki Univ. Hosp., Helsinki, Finland, ⁴Univ. of Oulu, Oulu, Finland, ⁵Utrecht Univ., Utrecht, Netherlands, ⁶Boston Univ., Boston, MA, ⁷Oulu Univ. Hosp., Oulu, Finland, ⁸The Univ. of Queensland, Brisbane, Australia
- 263 PATELLORE MORAL CARTILAGE MRI UTE-T2* CHANGES OVER THE FIRST 2 YEARS FOLLOWING ANTERIOR CRUCIATE LIGAMENT RECONSTRUCTION SHOW ASSOCIATIONS WITH PATIENT REPORTED OUTCOMES 9 YEARS LATER A. A. Williams², N. P. Drain³, Y. Qian⁴, C. R. Chu^{1,2}, ¹Stanford Univ., Stanford, CA, ²Palo Alto Veterans Hosp., Palo Alto, CA, ³Univ. of Pittsburgh, Pittsburgh, PA, ⁴NYU Grossman Sch. of Med., New York, NY
- 264 ELUCIDATING THE EFFECT OF PRIOR ANTERIOR CRUCIATE LIGAMENT INJURY AND AGE ON KNEE ARTICULAR CARTILAGE MORPHOLOGY AND QUALITY A. Mündermann^{2,3}, S. Herger^{1,2}, A-M. Liphardt^{4,5}, C. Nüesch^{1,2,3,6}, W. Wirth^{7,8}, S. Maschek⁷, D. Harder⁹, C. Egloff¹, ¹Dept. of Orthopaedics and Traumatology, Univ. Hosp. Basel, Basel, Switzerland, ²Dept. of BioMed. Engineering, Univ. of Basel, Basel, Switzerland, ³Dept. of Clinical Res., Univ. of Basel, Basel, Switzerland, ⁴Friedrich-Alexander-Univ. Erlangen-Nürnberg, Erlangen, Germany, ⁵Univ.sklinikum Erlangen, Erlangen, Germany, ⁶Dpartment of Spine Surgery, Univ. Hosp. Basel, Basel, Switzerland, ⁷Chondrometrics GmbH, Freilassing, Germany, ⁸Paracelsus Med. Univ., Salzburg, Austria, ⁹Dept. of Radiology, Univ. Hosp. Basel, Basel, Switzerland
- 265 CLINICAL AND IMAGING FACTORS ASSOCIATED WITH INCIDENT RADIOGRAPHIC OSTEOARTHRITIS OVER 8 YEARS IN INDIVIDUALS AGE 65 AND OVER F. G. Gassert², G. B. Joseph¹, J. A. Lynch¹, J. Luitjens^{1,3}, M. Nevitt¹, C. E. McCulloch¹, N. E. Lane⁴, S. Majumdar¹, T. M. Link¹, ¹Univ. of California, San Francisco, San Francisco, CA, ²Technical Univ. of Munich, Munich, Germany, ³Ludwig Maximilians Univ., Munich, Germany, ⁴Univ. of California, Davis, Davis, CA
- 266 3-D RELATIONSHIPS BETWEEN JOINT SPACE NARROWING AND BONE STRUCTURE AT THE KNEE AS UNCOVERED BY WEIGHT BEARING COMPUTED TOMOGRAPHY N. A. Segal, M. R. Williams², S. Roques³, C. J. Tonkin⁴, G. M. Treece⁵, A. H. Gee⁵, K. E. Poole⁶, T. Neogi⁷, M. C. Nevitt⁸, J. A. Lynch⁸, T. D. Turmezei⁹, for the MOST Study Group, ¹Univ. of Kansas Med. Ctr., Kansas City, KS, ²Norfolk and Norwich Univ. Hosp. Fndn. Trust, Norwich, United Kingdom, ³Univ. of East Anglia, Norwich, United Kingdom, ⁴Annapolis Community Hlth.Ctr. and Norwich Univ. Hosp. NHS Fndn. Trust, Annapolis Royal, NS, Canada, ⁵Cambridge Univ. Engineering Dept., Cambridge, United Kingdom, ⁶Univ. of Cambridge, Cambridge, United Kingdom, ⁷Boston Univ. Sch. of Med., Boston, MA, ⁸Univ. of California San Francisco, San Francisco, CA, ⁹Norfolk and Norwich Univ. Hosp. NHS Fndn. Trust, Norwich, United Kingdom
- 267 BASELINE PREDICTORS OF KNEE CARTILAGE MAGNETIC RESONANCE T1? AND T2 RELAXATION TIMES 10 YEARS AFTER ANTERIOR CRUCIATE LIGAMENT RECONSTRUCTION W. Holden, R. Lartey¹, N. Obuchowski¹, S. Gaj¹, J. Kim¹, M. Li¹, B. L. Eck¹, C. S. Winalski¹, F. Altahawi¹, M. H. Jones², L. J. Huston³, K. D. Harkins³, M. V. Knopp⁴, C. C. Kaeding⁴, K. P. Spindler¹, X. Li¹, ¹Cleveland Clinic, Cleveland, OH, ²Brigham and Women's Hosp., Boston, MA, ³Vanderbilt Univ., Nashville, TN, ⁴The Ohio State Univ., Columbus, OH
- 268 PREDICTION OF STRUCTURAL DISEASE PROGRESSION IN KNEE OSTEOARTHRITIS FROM 3-D WEIGHT BEARING JOINT SPACE WIDTH N. A. Segal, S. E. Ghobrial², M. R. Williams³, C. J. Tonkin⁴, G. M. Treece⁵, A. H. Gee⁵, K. E. Poole⁶, T. Neogi⁷, M. C. Nevitt⁸, J. A. Lynch⁸, T. D. Turmezei³, for the MOST Study Group, ¹Univ. of Kansas Med. Ctr., Kansas City, KS, ²Royal Coll. of Surgeons of Ireland, Dublin, Ireland, ³Norfolk and Norwich Univ. Hosp. NHS Fndn. Trust, Norwich, United Kingdom, ⁴Annapolis Community Hlth.Ctr. and Norwich Univ. Hosp. NHS Fndn. Trust, Annapolis Royal, NS, Canada, ⁵Cambridge Univ. Engineering Dept., Cambridge, United Kingdom, ⁶Univ. of Cambridge, Cambridge, United Kingdom, ⁷Boston Univ. Sch. of Med., Boston, MA, ⁸Univ. of California San Francisco, San Francisco, CA

- 269 MEDIAL MENISCUS TEAR PROGRESSES MEDIAL MENISCUS EXTRUSION BEYOND OSTEOPHYTE WIDTH IN MIDDLE-AGED POPULATIONS WITH K/L 0 -DATA FROM THE OSTEOARTHRITIS INITIATIVE H. Kaneko², A. Adili^{1,2,3}, T. Aoki², L. Liu^{2,3}, Y. Negishi², J. Tomura^{1,2}, S. Wakana^{1,2}, Y. Kim^{1,2}, K. Kobayashi^{1,2}, M. Kubota^{1,2}, M. Ishijima^{1,2,3}, ¹Juntendo Univ. Graduate Sch. of Medicine, Tokyo, Japan, ²Juntendo Univ., Faculty of Med., Tokyo, Japan, ³Juntendo Univ. Graduate Sch. of Med., Tokyo, Japan
- 270 DO AUTOMATED, U-NET-BASED CARTILAGE SEGMENTATIONS FROM MRI BENEFIT FROM MANUAL QUALITY CONTROL AND CORRECTION? DATA FROM THE IMI-APPROACH PROJECT S. Maschek², A. Wisser^{1,2}, M. P. Jansen³, S. C. Mastbergen³, A. C. Marijnissen³, F. Lafeber³, A. Lalonde⁴, H. Weinans³, F. J. Blanco⁵, F. Berenbaum⁶, M. Kloppenburg⁷, I. K. Haugen⁸, C. H. Ladel⁹, F. W. Roemer^{10,11}, F. Eckstein^{1,2}, W. Wirth^{1,2}, ¹Chondrometrics GmbH, Freilassing, Germany, ²Paracelsus Med. Univ., Salzburg, Austria, ³Univ. Med. Ctr. Utrecht, Utrecht, Netherlands, ⁴Servier, Suresnes, France, ⁵INIBIC-Univ. de A Coruña (UDC), A Coruña, Spain, ⁶Sorbonne Univ., Inserm, APHP hôpital Saint-Antoine, Paris, France, ⁷Leiden Univ. Med. Ctr., Leiden, Netherlands, ⁸Diakonhjemmet Hosp., Oslo, Norway, ⁹Consultant, Darmstadt, Germany, ¹⁰Univ. Hosp. & Univ. of Erlangen, Erlangen, Germany, ¹¹Boston Univ. Sch. of Med., Boston, MA
- 271 EVALUATION OF OSTEOARTHRITIC FEATURES IN PERIPHERAL JOINTS BY ULTRASOUND IMAGING: A SYSTEMATIC REVIEW P. Molyneux, C. Bowen², R. Ellis¹, K. Rome¹, M. Frecklington¹, M. Carroll¹, ¹Auckland Univ. of Technology, Auckland, New Zealand, ²Southampton Univ., Southampton, United Kingdom
- 272 A BIBLIOMETRIC ANALYSIS OF PUBLISHED RESEARCH EMPLOYING MUSCULOSKELETAL IMAGING MODALITIES TO EVALUATE FOOT OSTEOARTHRITIS P. Molyneux, S. Stewart¹, C. Bowen², R. Ellis¹, K. Rome¹, M. Carroll¹, ¹Auckland Univ. of Technology, Auckland, New Zealand, ²Southampton Univ., Southampton, United Kingdom
- 273 INTERNATIONAL MULTISPECIALTY DELPHI CONSENSUS ON HOW TO EXAMINE ULTRASOUND IMAGING FEATURES OF FIRST METATARSOPHALANGEAL JOINT OSTEOARTHRITIS P. Molyneux, C. Bowen², R. Ellis¹, K. Rome¹, M. Carroll¹, ¹Auckland Univ. of Technology, Auckland, New Zealand, ²Southampton Univ., Southampton, United Kingdom
- 274 MEDIAL MENISCUS EXTRUSION IN MIDDLE-AGED PATIENTS WITH K/L GRADE 0 IS A RISK FACTOR FOR POSTERIOR ROOT INJURY 6 YEARS LATER - 6-YEAR LONGITUDINAL ANALYSIS OF OAI DATA K. Sugitani², S. Hada^{1,2}, A. Adili^{1,2,3}, T. Aoki¹, J. Tomura^{1,2}, S. Wakana^{1,2}, Y. Kim^{1,2}, K. Kobayashi¹, H. Kaneko^{1,2}, M. Kubota^{1,2}, M. Ishijima^{1,2,3}, ¹Dept. of Orthopaedics, Juntendo Univ., Faculty of Med., Tokyo, Japan, ²Dept. of Med. for Orthopaedics and Motor Organ, Juntendo Univ. Graduate Sch. of Med., Tokyo, Japan, ³Sportology Ctr., Juntendo Univ. Graduate Sch. of Med., Tokyo, Japan
- 275 PRESENCE OF RADIOGRAPHIC EROSION HAND OSTEOARTHRITIS AND LONGITUDINAL CHANGES IN THIGH MUSCLE QUALITY: DATA FROM OSTEOARTHRITIS INITIATIVE DATA K. Moradi¹, R. M. Kwee², B. Mohajer¹, F. W. Roemer³, A. Guermazi³, S. Demehri, ¹Johns Hopkins Univ. Sch. of Med., Baltimore, MD, ²Zuyderland Med. Ctr., Heerlen/Sittard/Geleen, Netherlands, ³Boston Univ. Sch. of Med., Boston, MA
- 276 MAGNETIC RESONANCE FINGERPRINTING IN THE KNEE CARTILAGE COMPARED TO CONVENTIONAL METHODS USING AUTOMATED CARTILAGE SEGMENTATION D. Bencikova, M. A. Cloos², V. Janacova¹, S. Trattning^{1,3,4,5}, V. Juras¹, ¹Med. Univ. of Vienna, Vienna, Austria, ²The Univ. of Queensland, Queensland, Australia, ³CD Lab. for MR Imaging Biomarkers (BIOMAK), Vienna, Austria, ⁴Ludwig Boltzmann Inst. for Experimental and Clinical Traumatology, Vienna, Austria, ⁵Inst. for Clinical Molecular MRI in the Musculoskeletal System, Vienna, Austria
- 277 CONTRAST AGENT DIFFUSION REFLECTS BIOMECHANICAL FINITE ELEMENT MODEL PROPERTIES OF ARTICULAR CARTILAGE J. A. Tuppurainen², J. Jäntti^{1,2}, M. T. Nissinen¹, M. C. Fugazzola³, R. van Weeren³, A. Joenathan⁴, M. W. Grinstaff⁴, H. Matikka², R. K. Korhonen¹, J. T. Mäkelä^{1,2}, ¹Univ. of Eastern Finland, Kuopio, Finland, ²Kuopio Univ. Hosp., Kuopio, Finland, ³Utrecht Univ., Utrecht, Netherlands, ⁴Boston Univ., Boston, MA

- 278 ASSOCIATION BETWEEN MEDIAL MENISCUS EXTRUSION AND MECHANICAL AXIS OF THE LOWER LIMB IN ELDERLIES -THE BUNKYO HEALTH STUDY- Y. NEGISHI², H. KANEKO^{1,3}, A. ADILI^{1,3}, L. LIU^{1,4}, T. AOKI^{1,4}, K. KOBAYASHI¹, S. HADA¹, Y. KIM¹, J. TOMURA^{1,3}, J. SHIOZAWA¹, S. WAKANA^{1,3}, M. MOMOEDA¹, M. KUBOTA^{1,3}, Y. TAMURA^{4,5}, R. KAWAMORI^{4,5}, M. ISHIJIMA^{1,3,4}, ¹Dept. of Orthopaedics, Juntendo Univ., Faculty of Med., Tokyo, Japan, Bunkyo-ku,Tokyo, Japan, ²Dept. of Med. for Orthopaedics, Koto Hosp., Tokyo, Japan, Koto-ku, Tokyo, Japan, ³Dept. of Med. for Orthopaedics and Motor Organ, Juntendo Univ. Graduate Sch. of Med., Tokyo, Japan, Bunkyo-ku,Tokyo, Japan, ⁴Sportology Ctr., Juntendo Univ. Graduate Sch. of Med., Tokyo, Japan, Bunkyo-ku,Tokyo, Japan, ⁵Dept. of Metabolism & Endocrinology, Juntendo Univ., Graduate Sch. of Med., Tokyo, Japan, Bunkyo-ku,Tokyo, Japan
- 279 IDENTIFICATION OF CD64 AS A MARKER FOR THE DESTRUCTIVE POTENTIAL OF SYNOVITIS IN OSTEOARTHRITIS I. J. Teunissen van Manen, I. Di Ceglie¹, W. F. Theeuwes¹, N. J. van Kooten¹, M. I. Koenders¹, P. Jimenez-Royo², P. Laverman¹, P. M. van der Kraan¹, P. L. van Lent¹, A. B. Blom¹, M. H. van den Bosch¹, ¹Radboud Inst. for Molecular Life Sci. - Radboudumc, Nijmegen, Netherlands, ²GlaxoSmithKline, Stevenage, United Kingdom
- 280 ROLE OF INFRAPATELLAR FAT PAD SIZE IN OSTEOARTHRITIS PROGRESSION: DATA FROM THE OSTEOARTHRITIS INITIATIVE K. Lee¹, M. Banuls-Mirete¹, A. F. Lombardi¹, A. I. Posis¹, E. Y. Chang¹, N. E. Lane², M. Guma, ¹Univ. of California San Diego, La Jolla, CA, ²Univ. of California Davis, Sacramento, CA
- 281 CARTILAGE DISPLACEMENT AND STRAIN MAPPING VIA MRI IN AN INITIAL ACL-RECONSTRUCTED PATIENT COHORT E. Y. Miller, H. Zhu, W. Lee, C. P. Neu, Univ. of Colorado at Boulder, Boulder, CO
- 282 SENSITIVITY OF BI-EXPONENTIAL ULTRASHORT ECHO TIME-T2* ANALYSIS TO TENDON LAXITY A. Goyal, M. Barbieri, V. Mazzoli, F. Kogan, Stanford Univ., Stanford, CA
- 283 ASSOCIATION OF MAGNETIC RESONANCE IMAGING FINDINGS OF LIGAMENTUM TERES LESIONS WITH CLINICAL AND STRUCTURAL HIP OSTEOARTHRITIS Z. Akkaya, P. Giesler^{1,2}, K. Roach¹, G. Joseph¹, U. Upadhyay Bharadwaj¹, R. Souza¹, S. Majumdar¹, T. Link¹, ¹Univ. of California San Francisco, San Francisco, CA, ²Univ. Med. Ctr. Freiburg, Freiburg, Germany
- 284 IMAGING ACTIVATED MACROPHAGE LOCALIZATION USING A FOLATE RECEPTOR- TARGETED NEAR-INFRARED MOLECULAR CONTRAST AGENT IN INJURED KNEES H. Willcockson¹, H. Ozkan¹, J. E. Frank¹, H. Yuan¹, M. D. Williams¹, P. S. Low², L. Longobardi, ¹Univ. of North carolina at Chapel Hill, Chapel Hill, NC, ²Purdue Univ., West Lafayette, IN
- 285 FEMORAL CARTILAGE ULTRASOUND ECHO-INTENSITY IS A VALID MEASURE OF CARTILAGE COMPOSITION COMPARED TO T2 RELAXATION TIMES IN PATIENTS AFTER ANTERIOR CRUCIATE LIGAMENT RECONSTRUCTION M. S. Harkey, N. Michel¹, C. Grozier¹, J. Slade¹, K. Collins¹, B. Pietrosimone², D. Lalush², C. Lisee², I. Hacıhaliloglu³, R. Fajardo⁴, ¹Michigan State Univ., East Lansing, MI, ²Univ. of North Carolina at Chapel Hill, Chapel Hill, NC, ³Univ. of British Columbia, Vancouver, BC, Canada, ⁴Lansing Radiology Associates, Lansing, MI
- 286 RECTUS FEMORIS ULTRASOUND ECHO INTENSITY CAN VALIDLY ESTIMATE PERCENT INTRAMUSCULAR FAT IN PATIENTS FOLLOWING ANTERIOR CRUCIATE LIGAMENT RECONSTRUCTION C. Grozier, M. Keen¹, K. Collins¹, R. Fajardo², J. Slade¹, C. Kuenze³, M. S. Harkey¹, ¹Michigan State Univ., East Lansing, MI, ²Lansing Radiology Associates, Lansing, MI, ³Univ. of Virginia, Charlottesville, VA
- 287 RISK FACTORS FOR EXCLUSIONARY STRUCTURAL ELIGIBILITY FINDINGS IN DMOAD CLINICAL TRIALS M. Jarraya, F. W. Roemer^{2,3}, E. Ashbeck⁴, J. Lynch⁵, C. K. Kwoh⁴, A. Guermazi^{6,3}, ¹Massachusetts Gen. Hosp., Boston, MA, ²Univ. of Erlangen-Nuremberg, Erlangen, Germany, ³Boston Univ. Sch. of Med., Boston, MA, ⁴Univ. of Arizona Coll. of Med., Tucson, AZ, ⁵UCSF, San Francisco, CA, ⁶VVA Boston Hlth.care, Boston, MA
- 288 PRELIMINARY EVALUATION OF A NOVEL COMPUTED TOMOGRAPHY APPLICATION TO MONITOR KNEE OSTEOARTHRITIS R. Blay, Y. Golightly, G. Roskam, L. Bilek, Univ. of Nebraska Med. Ctr., Omaha, NE
- 289 QUANTITATIVE BONE MARROW LESION VOLUME AS A HARBINGER OF LONG-TERM KNEE CARTILAGE LOSS C. K. Kwoh, E. L. Ashbeck¹, M. Taljanovic¹, G. Gilles¹, A. Vohra¹, D. Robles¹, E. J. Bedrick², A. Guermazi³, J. Duryea⁴, ¹Univ. of Arizona Arthritis Ctr., Tucson, AZ, ²Dept. of Epidemiology and Biostatistics, Univ. of Arizona, Tucson, AZ, ³Boston Univ. Med. Ctr., Boston, MA, ⁴Harvard Med. Sch. Dept. of Radiology Brigham and Women's Hosp., Boston, MA

290	EVALUATING THE JOINT-LEVEL, SYSTEMIC, AND SYMPTOMATIC CONSEQUENCES OF LOW VAGAL TONE IN A RAT MODEL OF KNEE OSTEOARTHRITIS	C. J. Cruz, T. D. Yeater, K. D. Allen, Univ. of Florida, Gainesville, FL
291	LINKS BETWEEN OSTEOARTHRITIS, PERIODONTITIS DISEASE AND OSTEOPOROSIS IN A WILD MAMMAL POPULATION.	S. R. Hoy, J. A. Vucetich ¹ , L. M. Vucetich ¹ , M. Hindelang ¹ , J. Huebner ² , V. B. Kraus ² , ¹ Michigan Technological Univ., Houghton, MI, ² Duke Univ. Sch. of Med., Durham, NC
292	MODULATORY EFFECTS OF REMOTE TAI CHI ON THE FUNCTIONAL CONNECTIVITY OF DORSOLATERAL PREFRONTAL CORTEX IN PATIENTS WITH KNEE OSTEOARTHRITIS PAIN: A RANDOMIZED BRAIN-IMAGING STUDY	J. Kong ¹ , C. Wang, Sr. ² , ¹ Massachusetts Gen. Hosp., Boston, MA, ² Tufts Med. Ctr., Boston, MA
293	THE DIAGNOSTIC CAPABILITIES OF NONINVASIVE FECAL BIOMARKERS OF NSAID-INDUCED INTESTINAL LESIONS IN PATIENTS WITH OSTEOARTHRITIS	O. Gubska, A. Kuzminets, Bogomolets Natl. Med. Univ., Kyiv, Ukraine
294	OSTEOARTHRITIS PROGRESSION LEADS TO NEUROCHEMICAL BRAIN CHANGES - STUDY IN A RAT MODEL	M. K?dziora, J. Mlost, M. Bia?o?, Z. Michalec-Warzecha, A. W?sik, K. Starowicz, Maj Inst. of Pharmacology, Polish Academy of Sci., Cracow, Poland
295	POST-TRAUMATIC OSTEOARTHRITIS LEADS TO STRUCTURAL AND FUNCTIONAL BRAIN CHANGES IN AGED RATS	J. L. Griffith, P. A. Valdes Hernandez, Y. Cruz-Almeida, M. Febo, K. D. Allen, Univ. of Florida, Gainesville, FL
296	CARTILAGE-BOUND LARGE MULTILAMELLAR LIPOSOMES SHOW POTENTIAL CARTILAGE PROTECTION FROM INFLAMMATORY STIMULUS BY ATTENUATING AGGRECAN DEGRADATION	R. Wechsler, C. Thudium ² , ¹ Moebius Med., Tel Aviv, Israel, ² Nordic BioSci., Herlev, Denmark
297	IDENTIFICATION OF DISTINCT CELLULAR POPULATIONS IN THE SYNOVIUM OF EARLY- AND LATE-STAGE RADIOGRAPHIC KNEE OA USING SINGLE NUCLEUS RNA SEQUENCING?	K. Thavaratnam, E. Gracey ² , A. Ratneswaran ³ , S. Vohra ³ , S. Lively ³ , J. Rockel ³ , R. Gandhi ³ , D. Elewaut ² , M. Kapoor ¹ , ¹ Div. of Orthopedics, Osteoarthritis Res. Program, Schroeder Arthritis Inst., Univ. Hlth.Network, Dept. of Surgery and Dept. of Lab. Med. and Pathobiology, Univ. of Toronto, Toronto, ON, Canada, ² Molecular Immunology and Inflammation Unit, VIB Ctr. for Inflammation Res., Ghent Univ., Dept. of Rheumatology, Ghent Univ. Hosp., Ghent, Belgium, ³ Div. of Orthopedics, Osteoarthritis Res. Program, Schroeder Arthritis Inst., Univ. Hlth.Network, Toronto, ON, Canada
298	MECHANISM OF INTERLEUKIN-1 BETA INDUCED EXPRESSION OF COMPLEMENT COMPONENT 3 IN HUMAN CHONDROCYTES AND ITS PATHOGENESIS IN OSTEOARTHRITIS	J. Xu, F. Xu ² , P. Woster ¹ , ¹ Med. Univ. of South Carolina, Charleston, SC, ² Carnegie Mellon Univ., Pittsburgh, PA
299	EFFECTS ON ARTICULAR CARTILAGE MECHANICAL PROPERTIES FOLLOWING A NON-INVASIVE ANTERIOR CRUCIATE LIGAMENT RUPTURE IN RAT MODEL	J. Doan, S. Sim, C. Mathieu, A. Pieters, M. Garon, Biomomentum, Laval, QC, Canada
300	DECIPHERING UROLITHINS A AND B ACTIVITIES ON MUSCLE: TRANSCRIPTOMIC MODULATION ON HUMAN PRIMARY MYOTUBES	Y. Henrotin, C. Lambert, A. Florin, J. Zappia, P. Centonze, C. Sanchez, Univ. of Liège, Liège, Belgium
301	IDENTIFYING DISTINCT CELL TYPES IN INFRAPATELLAR FAT PAD DURING OSTEOARTHRITIS	H. Peters ² , K. Delos Santos ¹ , S. Vohra ¹ , S. Lively ¹ , K. Perry ¹ , R. Gandhi ¹ , M. Kapoor ^{1,2} , ¹ Schroeder Arthritis Inst., Univ. Hlth.Network, Toronto, ON, Canada, ² Univ. of Toronto, Toronto, ON, Canada
302	LONGITUDINAL DEVELOPMENT OF CARTILAGE MICROBIAL DNA SIGNATURES FOLLOWING ORAL MICROBIOME INOCULATION OF GERM-FREE MICE	E. Holmlund ¹ , L. Schlupp ² , V. Izda ³ , E. Nguyen ¹ , C. Dunn ¹ , C. Velasco ¹ , M. Barrett ² , G. Dyson ² , M. Jeffries ² , ¹ Univ. of Oklahoma Hlth.Sci. Ctr., Oklahoma City, OK, ² Oklahoma Med. Res. Fndn., Oklahoma City, OK, ³ Icahn Sch. of Med. at Mt. Sinai, New York, NY
303	VOLUNTARY WHEEL RUNNING EXACERBATES JOINT DAMAGE, BUT NOT PHYSICAL ACTIVITY LEVELS, FOLLOWING MENISCAL INJURY IN MICE	K. M. Chan, J. L. Griffith ¹ , Y. C. Pacheco ² , K. D. Allen ¹ , ¹ Univ. of Florida, Gainesville, FL, ² Univ. of Oregon, Eugene, OR

304	CHARACTERIZING THE TRAJECTORY OF MURINE KNEE OSTEOARTHRITIS ACROSS MENOPAUSE	G. Gilmer, N. Jackson ¹ , J. Bergmann ¹ , A. Bean ¹ , H. Iijima ² , C. Evans ³ , R. Thurston ¹ , F. Ambrosio ⁴ , ¹ Univ. of Pittsburgh, Pittsburgh, PA, ² Nagoya Univ., Nagoya, Japan, ³ Mayo Clinic, Rochester, MN, ⁴ Harvard Med. Sch., Boston, MA
305	DESPITE UNIQUE WOUND HEALING ABILITIES, AFRICAN SPINY MICE (ACOMYS) ARE NOT PROTECTED FROM OSTEOARTHRITIS DEVELOPMENT FOLLOWING MENISCAL INJURY	K. M. Chan, N. A. Thurlow, M. Maden, K. D. Allen, Univ. of Florida, Gainesville, FL
306	SUBCHONDRAL BONE CHANGES IN OSTEOARTHRITIS ANIMAL MODELS AND HUMANS INDUCED BY MENISCAL LESIONS - A SYSTEMATIC REVIEW OF THE LITERATURE	T. Oláh, ² M. Cucchiari ^{1,2} , H. Madry ^{1,2} , ¹ Saarland Univ., Homburg, Germany, ² Cartilage Net of the Greater Region, Homburg, Germany
307	POSTERIOR MEDIAL MENISCUS COMPOSITION ASSOCIATES WITH PATIENT REPORTED OUTCOMES 2 YEARS AFTER ANTERIOR CRUCIATE LIGAMENT RECONSTRUCTION	A. A. Williams, ² C. R. Chu ^{1,2} , ¹ Stanford Univ., Stanford, CA, ² Palo Alto Veterans Hosp., Palo Alto, CA
308	REGIONAL MIGRATORY OSTEOPOROSIS IN THE KNEE: 12 CASES	i. moriyama, Ogikubo Hosp., Tokyo, Japan
309	RESULTS OF ANKLE JOINT ARTHROPLASTY IN OSTEOARTHRITIS AND TUMORS OF THE DISTAL TIBIA	V. Protsenko, Y. Solonitsyn ¹ , G. Protsenko ² , ¹ State Inst. "Inst. of Traumatology and Orthopedics of the Natl. Academy of Med. Sci. of Ukraine", Kiev, Ukraine, ² State Inst. "Natl. Scientific Ctr. "M.D. Strazhesko Inst. of Cardiology, clinical and regeneration medicine" of the Natl. Academy of Med. Sci. of Ukraine", Kiev, Ukraine
310	BONE MINERAL DENSITY AND BODY COMPOSITION IN POSTMENOPAUSAL WOMEN WITH KNEE OSTEOARTHRITIS	N. Grygorieva, M. Bystrytska, A. Musiienko, N. Zaverukha, D. F. Chebotarev State Inst. of Gerontology NAMS of Ukraine, Kyiv, Ukraine
311	HISTOPATHOLOGICAL AND TRANSCRIPTOMIC CHARACTERIZATION OF A MOUSE MODEL OF SINGLE HINDLIMB IMMOBILIZATION-INDUCED FIBROSIS	L. Moore, S. Lessard ¹ , P. Singh ¹ , D. Al-Abdulla ² , L. Ying ¹ , P. Sculco ¹ , S. Rodeo ¹ , M. Otero ¹ , ¹ Hosp. for Special Surgery, New York, NY, ² Weill Cornell Med.-Qatar, Doha, Qatar
312	DELAYED PREBIOTIC FIBRE SUPPLEMENTATIONS EFFECTIVELY REDUCED FAT INFILTRATION AND KNEE JOINT DEGENERATION IN MALE RATS	N. Abughazaleh, H. Smith, R. Anne Seerattan, W. Herzog, Univ. of Calgary, Calgary, AB, Canada
313	EVALUATING QUADRICEPS STRENGTH WITH THE ONE-LEG RISE TEST IN ADULTS AT RISK OF POST-TRAUMATIC OSTEOARTHRITIS AFTER ANTERIOR CRUCIATE LIGAMENT RECONSTRUCTION	T. J. West, A. M. Bruder, M. A. Girdwood, M. J. Scholes, L. K. To, J. L. Couch, S. C. Evans, M. J. Haberfield, C. J. Barton, E. M. Roos, K. M. Crossley, A. G. Culvenor, La Trobe Univ., Bundoora, Australia
314	TOFACITINIB INHIBITS COLLAGEN BIOMARKERS OF FIBROSIS IN TGF- β STIMULATED FIBROBLAST-LIKE SYNOVIOCYTES FROM PATIENTS WITH OSTEOARTHRITIS	S. Falkenløve Madsen ¹ , S. Madsen ¹ , E. Hollaar ¹ , T. Gantzel ² , M. R. Andersen ³ , A-C. Bay-Jensen ¹ , C. S. Thudium, ¹ Nordic BioSci., Herlev, Denmark, ² Gentofte Hosp., Gentofte, Denmark, ³ Herlev Gentofte Hosp., Herlev, Denmark
315	DEPTH-WISE STRUCTURAL AND COMPOSITIONAL COMPARISON BETWEEN HUMAN FEMORAL CONDYLE AND TIBIAL PLATEAU CARTILAGE AT DIFFERENT STAGES OF OSTEOARTHRITIS	M. Ebrahimi, ² M. Englund ³ , M. Finnilä ² , S. Saarakkala ² , R. Korhonen ¹ , P. Tanska ¹ , ¹ Univ. of Eastern Finland, Kuopio, Finland, ² Univ. of Oulu, Oulu, Finland, ³ Lund Univ., Lund, Sweden
316	TISSUE ENGINEERED OSTEOCHONDRAL TISSUE FOR CHONDRAL LESION TREATMENT	Y. Li, H. Cheng, M. Yuan, W. Zhang, B. Chan, The Univ. of Hong Kong, Hong Kong, Hong Kong
317	TIME-DEPENDENT CELL RELEASE RATE AND GENE EXPRESSION PROFILE IN HUMAN ARTICULAR CHONDROCYTE ISOLATION	M. Zhang, Z. Liu, T. Budden, A. Miller, J. Wang, KUMC, Kansas City, KS
318	EARLY ABLATION OF CHEMOKINE RECEPTOR-2 IN MOUSE OSTEOBLASTS DECREASES CARTILAGE MATRIX DAMAGE AND SUBCHONDRAL BONE SCLEROSIS DURING INJURY-INDUCED OSTEOARTHRITIS	H. Willcockson, H. Ozkan ¹ , J. Valdes-Fernandez ² , E. Mucahit ¹ , L. Musawwir ¹ , L. Longobardi ¹ , ¹ Univ. of North Carolina at Chapel Hill, Chapel Hill, NC, ² Clinica Univ. de Navarra, Pamplona, Spain

- 319 RELATIONSHIP BETWEEN LABRAL LENGTH AND SYMPTOMS INPATIENTS WITH ACETABULAR DYSPLASIA BEFORE ROTATIONAL ACETABULAR OSTEOTOMY Y. Shirogane^{2,3}, Y. Homma^{1,2,3}, N. Yanagisawa⁴, M. Higano³, Y. Hirasawa³, S. Nakamura³, T. Baba^{1,2}, K. Kaneko², H. Taneda³, M. Ishijima^{1,2}, ¹Juntendo Univ. Graduate Sch. of Med., Tokyo, Japan, ²Faculty of Med., Juntendo Univ., Tokyo, Japan, ³Nishitokyo Chuo Gen. Hosp., Tokyo, Japan, ⁴Clinical Res. and Trial Ctr., Juntendo Univ., Tokyo, Japan
- 320 EVIDENCE FOR A ROLE OF CHONDROCYTE TRANSDIFFERENTIATION IN OSTEOARTHRITIS IN THE FORM OF INCREASED PREVALENCE OF DISTAL-LESS HOMEBOX 5 B. Rose, M. Juryneć, Univ. of Utah, Salt Lake City, UT
- 321 A WHOLE-JOINT HISTOPATHOLOGIC GRADING SCHEME FOR MURINE KNEE OSTEOARTHRITIS J. Wang, C. W. Grote^{1,2}, M. J. Mackay¹, Q. Lu¹, X. Liu¹, A. R. Meyer¹, ¹KUMC, Kansas City, KS, ²Children's Mercy Hosp. & Clinics, Kansas City, MO
- 322 DEVELOPING AND CHARACTERIZING AN OSTEOCHONDRAL-SYNOVIAL MODEL FOR EVALUATING PSORIATIC ARTHRITIS THERAPIES A. Ziyaean^{1,2,3}, K. Oikonomopoulou¹, V. Chandran^{1,4,5,6}, S. Viswanathan^{2,3,4}, ¹Osteoarthritis Res. Program, Div. of Orthopedic Surgery, Schroeder Arthritis Inst., Univ. Hlth.Network, Toronto, ON, Canada, ²Krembil Res. Inst., Univ. Hlth.Network, Toronto, ON, Canada, ³Inst. of BioMed. Engineering, Univ. of Toronto, Toronto, ON, Canada, ⁴Div. of Rheumatology, Dept. of Med., Univ. of Toronto, Toronto, ON, Canada, ⁵Inst. of Med. Sci., Univ. of Toronto, Toronto, ON, Canada, ⁶Dept. of Lab. Med. and Pathobiology, Univ. of Toronto, Toronto, ON, Canada
- 323 FAT PAD ALTERATIONS WITH AGEING AND OSTEOARTHRITIS IN AN OVINE MODEL A. Bernard¹, J-M. Vandeweerdt¹, V. Simon¹, D. Houbotte¹, M. J. Peffers², T. Welting³, F. Hontoir, ¹Univ. of Namur, Namur, Belgium, ²Univ. of Liverpool, Liverpool, United Kingdom, ³Maastricht Univ. Med. Ctr., Maastricht, Netherlands
- 324 ASSOCIATION OF SEMIMEMBRANOSUS TENDINOPATHY, PESSERINE BURSOPATHY AND MEDIAL GASTROCNEMIUS PATHOLOGY IN PATIENTS WITH MEDIAL KNEE PAIN: ANALYSIS OF DATA FROM THE OSTEOARTHRITIS INITIATIVE A. N. Schroeder¹, D. T. Felson², A. C. Johnson³, G. Rabasa², N. A. Segal⁴, ¹Univ. Hosp., Cleveland, OH, ²Boston Univ., Boston, MA, ³Mayo Clinic, Minneapolis, MN, ⁴Univ. of Kansas Med. Ctr., Kansas City, KS
- 325 RESPONSE OF KNEE CARTILAGE T2 RELAXATION TIMES TO 21-DAYS OF 6°HEAD-DOWN-TILT BED REST COMBINED WITH EXERCISE AND NUTRITION COUNTERMEASURES A-M. Liphardt, E-T. Godonou¹, A. Mündermann^{2,3}, M. Dreiner⁴, F. Zaucke⁵, W. Wirth^{6,7}, A. Wisser^{6,7}, S. Maschek^{6,7}, F. Eckstein^{8,9}, G. Schett¹, A. Niehoff⁴, ¹Friedrich-Alexander-Univ. (FAU) Erlangen-Nürnberg & Univ.klinikum Erlangen, Erlangen, Germany, ²Univ. Hosp. Basel, Basel, Switzerland, ³Univ. of Basel, Basel, Switzerland, ⁴German Sport Univ. Cologne, Cologne, Germany, ⁵Univ. Hosp. Frankfurt & Goethe Univ., Frankfurt am Main, Germany, ⁶Chondrometrics GmbH, Freilassing, Germany, ⁷Paracelsus Medizinische Univ. Salzburg, Salzburg, Austria, ⁸Paracelsus Medizinische Univ. Salzburg, Salzburg, Germany, ⁹Chondrometrics GmbH, Freilassing, Austria
- 326 CYCLIC LOADING THREATENS THE RETAINMENT OF BOTH PROTEOGLYCANS AND COLLAGEN NEAR TO CHONDRAL LESIONS A. S. Eskelinen, M. Hamada¹, C. Florea¹, P. Tanska¹, A. J. Grodzinsky², R. K. Korhonen¹, ¹Univ. of Eastern Finland, Kuopio, Finland, ²Massachusetts Inst. of Technology, Cambridge, MA
- 327 THE CROSSTALK OF POST-INJURY EVENTS: A DRIVER FOR POST-TRAUMATIC OSTEOARTHRITIS? A. Ruiz, C. Zhang, T. Kirsch, J. G. Raya, NYU Sch. of Med., New York, NY
- 328 NO CLEAR DISTINCTION IN THE TYPE OF CALCIUM CRYSTAL BETWEEN OSTEOARTHRITIS AND CHONDROCALCINOSIS ON HISTOLOGICAL LEVEL S. Sina, F. I. Kołowski, C. H. Lohmann, J. Bertrand, Otto-von-Guericke Univ. Magdeburg, Magdeburg, Germany
- 329 ER STRESS PATHWAY ACTIVATION IN SYNOVIUM AND PERIPHERAL M?S IN?OSTEOARTHRITIS? M. Rasti¹, A. Ziyaean^{1,2}, S. Viswanathan^{2,3}, ¹Arthritis Program, Schroeder Arthritis Inst. and Krembil Res. Inst., Univ. Hlth.Network, Toronto, ON, Canada, ²Inst. of BioMed. Engineering, Univ. of Toronto, Toronto, ON, Canada, ³Div. of hematology, Dept. of Med., Univ. of Toronto, Toronto, ON, Canada
- 330 ROLES OF PIEZO2 CHANNEL FOR STRETCH RESPONSE IN CHONDROCYTES K. Murata, S. Kawabata, T. Kojima, H. Terada, C. Takasu, Y. Oka, N. Kanemura, Saitama Prefectural Univ., Koshigaya city, Saitama, Japan

- 331 INTRAARTICULAR INJECTION OF BACTERIAL DNA FROM HUMAN OA CARTILAGE IS ASSOCIATED WITH WORSENERD PTOA IN MICE L. Schlupp, E. Nguyen², V. Izda³, E. Holmlund², C. Dunn², M. Barrett¹, G. Dyson¹, M. Jeffries¹, 1Oklahoma Med. Res. Fndn., Oklahoma City, OK, 2Univ. of Oklahoma Hlth.Sci. Ctr., Oklahoma City, OK, 3Icahn Sch. of Med. at Mt. Sinai, New York, NY
- 332 OSTEOMODULIN IS INVOLVED IN BONE AND CARTILAGE HOMEOSTASIS AND OSTEOARTHRITIS DEVELOPMENT J. Zappia¹, Q. Tong², R. Van der Cruyssen³, F. Cornelis⁴, C. Lambert¹, T. P. Coelho¹, J. Grisart⁵, E. kague², R. Lories⁴, m. muller¹, D. Elewaut³, C. Hammond², C. Sanchez¹, Y. Henrotin, 1Univ. of Liège, Liège, Belgium, 2Univ. of Bristol, Bristol, United Kingdom, 3Ghent Univ., Ghent, Belgium, 4KU Leuven, Leuven, Belgium, 5Artialis SA, Liège, Belgium
- 333 IN SILICO PREDICTION OF CYTOKINE DRIVERS OF KNEE OSTEOARTHRITIS USING NETWORK-BASED CYTOKINE INFERENCE H. Iijima, F. Ambrosio², Y. Matsui³, 1Inst. for Advanced Res., Nagoya Univ., Nagoya, Japan, 2Dept. of Physical Med. and Rehabilitation, Spaulding Rehabilitation Hosp. and Harvard Med. Sch., Boston, MA, 3Inst. for Glyco-core Res., Tokai Natl. Higher Ed. and Res. System, Nagoya Univ., Nagoya, Japan
- 334 TRANSFORMING GROWTH FACTOR BETA DRIVEN INTERLEUKING PRODUCTION AND ACTIVATION BY HUMAN SYNOVIAL FIBROBLASTS J. S. Steijns¹, R. H. Stassen¹, B. A. Housmans¹, L. C. Peeters¹, A. Cremers¹, G. G. van den Akker¹, M. M. Caron, T. J. Welting^{1,2}, 1Maastricht Univ., Maastricht, Netherlands, 2Maastricht Univ. Med. Ctr., Maastricht, Netherlands
- 335 TO UNDERSTAND THE DICHOTOMY BETWEEN SYNOVIAL RESIDENT MACROPHAGES AND INFILTRATING MONOCYTES IN OA PROGRESSION S. Nouri, H. Hamidzada, A. Barazandeh, A. Ziyaeyan, M. Rasti, S. Epelman, Sr., S. Viswanathan, Sr., Univ. Hlth.Network (UHN), Toronto, ON, Canada
- 336 NOVEL HIP OSTEOARTHRITIS MODEL SECONDARY TO FEMOROACETABULAR IMPINGEMENT IN IMMATURE RABBITS T. Kamenaga, M. Wu, R. H. Brophy, R. J. O'Keefe, J. C. Clohisy, C. Pascual-Garrido, Washington Univ., St. Louis, MO
- 337 ENDOTHELIN-1 REGULATES MECHANOTRANSDUCTION IN CARTILAGE IN A RECEPTOR-DEPENDENT MANNER L. Zhang, M. Au¹, J. E. Makhloufi², X. Houard², C. Wen¹, 1The Hong Kong Polytechnic Univ., Hong Kong, Hong Kong, 2Sorbonne Université, Paris, France
- 338 THE DUAL PRO-INFLAMMATORY AND BONE-PROTECTIVE ROLE OF CALCITONIN GENE-RELATED PEPTIDE ALPHA IN AGE-RELATED OSTEOARTHRITIS A. Hildebrandt¹, T. Dietrich¹, J. Weber¹, S. Zhou¹, M. Meyer-Guenderoth¹, T. Winkler¹, G. N. Duda¹, S. Tsitsilonis¹, J. Keller², T. Maleitzke, 1Charité - Univ.smedizin Berlin, Berlin, Germany, 2Univ. Med. Ctr. Hamburg-Eppendorf, Hamburg, Germany
- 339 LAMIN A/C ACCUMULATION BY DEFECTIVE AUTOPHAGY IS ASSOCIATED WITH CHONDROCYTE SENESCENCE AND JOINT DAMAGE P. López de Figueroa¹, J. Fafian-Labora², I. Lorenzo-Gomez¹, V. Calamia³, M. Lotz⁴, C. López-Otín⁵, F. J. Blanco^{1,3}, B. Carames, 1Unidad de Biología del Cartílago, Grupo de Investigación en Reumatología (GIR), Inst. de Investigación Biomédica de A Coruña (INIBIC), A Coruña, Spain, 2Univ.e da Coruña, A Coruña, Spain, 3Unidad de Proteómica, GIR, INIBIC-CHUAC, A Coruña, Spain, 4Scripps Res., La Jolla, CA, 5Departamento de Bioquímica y Biología Molecular, Inst. Univ.rio de Oncología, Univ. de Oviedo, Oviedo, Spain
- 340 EVALUATING THE PARACRINE RELEASE OF MYOKINES RELATIVE TO MYOPENIA AND FIBROSIS IN OSTEOARTHRITIS D. E. Martin, T. Soria², J. A. Cruz-Ayala¹, M. C. Gatterer², V. Dasa², L. Marrero^{2,3}, 1LSU Hlth.Sci. Ctr. New Orleans Sch. of Med., New Orleans, LA, 2LSU Hlth.Sci. Ctr. New Orleans Dept. of Orthopedics, New Orleans, LA, 3Morphology and Imaging Core, New Orleans, LA
- 341 ENDOCRINE DISRUPTORS: A NEW RISK FACTOR OF OSTEOARTHRITIS? EXPERIMENTAL DATA ON OSTEOARTHRITIS MURINE MODEL S. Berkani², I. Kouki^{1,2}, S. Babajko³, A. Pigenet¹, S. Bahieddine¹, X. Houard¹, M. Lotz⁴, B. Demeneix⁵, J-B. Fini⁵, F. Berenbaum^{1,2}, J. Sellam^{1,2}, A. Courties^{1,2}, 1Sorbonne Université, INSERM UMR 938, Ctr. de Recherche Saint-Antoine, Paris, France, 2Dept. of Rheumatology, Assistance Publique - Hôpitaux de Paris (AP-HP), Saint-Antoine Hosp., Paris, France, 3Ctr. de Recherche des Cordeliers, INSERM, Sorbonne Université, Université de Paris, Paris, France, 4Dept. of Molecular Med., Scripps Res., La Jolla, CA, 5UMR 7221, Phyma, CNRS-Muséum Natl. d'Histoire Naturelle, Sorbonne Université, Paris, France
- 342 THE ALARMIN S100A8/A9 AFFECTS MACROPHAGE PHENOTYPE IN A TIME-DEPENDENT MANNER AND FAVORS M2-LIKE MACROPHAGE DIFFERENTIATION AFTER LONG-TERM EXPOSURE N. J. van Kooten², I. J. Teunissen van Manen¹, T. Vogl³, J. Roth³, S. Koëter², P. M. van der Kraan¹, P. L. van Lent¹, A. B. Blom¹, M. H. van den Bosch¹, 1Radboud Univ. Med. center, Nijmegen, Netherlands, 2Canisius Wilhelmina Ziekenhuis, Nijmegen, Netherlands, 3Univ. of Muenster, Muenster, Germany

- 343 HYPER-PHYSIOLOGIC MECHANICAL LOADING CONDITIONS CAUSE A SHIFT IN THE EPIGENETIC LANDSCAPE IN NEO-CARTILAGE ORGANOIDS N. Bloks, Z. Harissa^{2,3}, A. Dicks^{3,2}, R. Coutinho de Almeida¹, G. Hajmoua¹, S. Adkar^{2,3}, Y. F. Ramos¹, F. Guilak^{2,3}, I. Meulenbelt¹, ¹LUMC, Leiden, Netherlands, ²Shriners Hosp. for Children, Saint Louis, MO, ³Washington Univ., Saint Louis, MO
- 344 ACTIVATION OF THE MECHANOSENSITIVE ION CHANNEL, PIEZO1 INCREASES IL6 PRODUCTION IN OSTEOCYTES S. Gilbert, R. Jones, P. White, D. Mason, Cardiff Univ., Cardiff, United Kingdom
- 345 A NOVEL MODEL THAT INCREASES MECHANICAL STRESS ON ARTICULAR CARTILAGE WITHOUT INVASIONS INTO THE JOINT S. Kawabata, T. Kojima, H. Terada^{Te}, C. Takasu, N. Kanemura, K. Murata, Saitama Prefectural Univ., Koshigaya, Japan
- 346 INTEGRIN SIGNALING AND REACTIVE OXYGEN SPECIES REGULATE ORPHAN NUCLEAR RECEPTOR 4A2 EXPRESSION AND TRANSCRIPTIONAL ACTIVITY IN CHONDROCYTES F. Garcia¹, K. Aponte¹, J. Collins², R. F. Loeser³, K. S. Mix, ¹Loyola Univ. New Orleans, New Orleans, LA, ²Thomas Jefferson Univ., Philadelphia, PA, ³Univ. of North Carolina Sch. of Med., Chapel Hill, NC
- 347 MULTI-PHOTON MICROSCOPY - A NOVEL METHOD TO ASSESS HUMAN CARTILAGE TISSUE QUALITY PRIOR TO OSTEOCHONDRAL TRANSPLANTATION Z. Abusara, I. Haider, E. Moo, S. Miller, S. Timmerman, W. Herzog, Univ. of Calgary, Calgary, AB, Canada
- 348 TGF- β ENHANCES PHOSPHATE DRIVEN MINERALIZATION OF HUMAN OA ARTICULAR CHONDROCYTES R. H. Stassen, G. G. van den Akker¹, D. A. Surtel¹, A. Cremers¹, M. M. Caron¹, L. W. van Rhijn², T. J. Welting^{1,2}, ¹Maastricht Univ., Maastricht, Netherlands, ²Maastricht Univ. Med. Ctr. +, Maastricht, Netherlands
- 349 MODELLING SENESCENCE IN OSTEOARTHRITIS: COMBINING IRRADIATION AND MECHANICAL LOADING IN HUMAN OSTEOCHONDRAL EXPLANTS I. Boone, J. J. van den Berg¹, M. Varela Eirin², M. Tuerlings¹, E. Houtman¹, M. Demaria², I. Meulenbelt¹, ¹Leiden Univ. Med. Ctr., Leiden, Netherlands, ²Univ. Med. Ctr. Groningen, Groningen, Netherlands
- 350 INHIBITION OF CHOLINE KINASE ALPHA IMPROVE SYNOVITIS AND CARTILAGE DAMAGE IN ANIMAL MODELS OF OSTEOARTHRITIS M. Cedenio, R. Coras, A. Cheng, A. Torres, P. Gil-Alarbase, J. Murilla-Saich, R. L. Sah, E. Sanchez-Lopez, R. Liu-Bryan, M. Guma, Univ. of California San Diego, La Jolla, CA
- 351 LOGINTUDINAL ASSOCIATIONS BETWEEN SERUM LEVELS OF OXYLIPINS AND KNEE INJURY AND OSTEOARTHRITIS SCORES IN HEALTHY YOUNG ADULTS WITH ACUTE KNEE INJURY J. Turnbull, R. R. Jha¹, D-H. Kim¹, D. A. Barrett¹, A. M. Valdes¹, J. Alderson², A. Williams³, T. L. Vincent², F. Watt⁴, V. Chapman¹, ¹Univ. of Nottingham, Nottingham, United Kingdom, ²Univ. of Oxford, Oxford, United Kingdom, ³Fortius Clinic, London, United Kingdom, ⁴Imperial Coll. London, London, United Kingdom
- 352 HIGH-IMPACT FN1 MUTATION ABROGATES RESPONSE OF CHONDROCYTES TO HYPER-PHYSIOLOGICAL LOADING M. van Hoolwerff, M. Nickel, Y. Ramos, I. Meulenbelt, Leiden Univ. Med. Ctr., Leiden, Netherlands
- 353 TAK1 MEDIATES HMGB1-INDUCED MACROPHAGE ACTIVATION IN OSTEOARTHRITIS C. Li, S. Lin, Z. Ouyang, S. Li, T. Liu, Y. Ding, Sun Yat-sen Mem. Hosp., Sun Yat-sen Univ., Guangzhou, China
- 354 G PROTEIN-COUPLED PH-SENSING RECEPTOR GPR68 REGULATES CHONDROCYTE INFLAMMATION THROUGH MODULATION OF MAPK SIGNALING PATHWAYS N. M. Khan, M. E. Diaz-Hernandez, S. Chihab, H. Drissi, Emory Univ., Atlanta, GA
- 355 DIMETHYL FUMARATE AS A POTENTIAL DISEASE MODIFYING AGENT FOR THE TREATMENT OF KNEE OSTEOARTHRITIS N. M. Khan, J. Kaiser, M. E. Diaz-Hernandez, S. Chihab, T. Eng, H. Drissi, Emory Univ., Atlanta, GA
- 356 INACTIVATION OF THE PROCALCITONIN ENCODING GENE PROTECTS FROM EXPERIMENTAL ARTHRITIS T. Maleitzke, T. Dietrich¹, A. Hildebrandt¹, J. Weber¹, J. Appelt¹, D. Jahn¹, E. Otto¹, D. Zocholl¹, S. Jiang², A. Baranowsky², G. N. Duda¹, S. Tsitsilonis¹, J. Keller², ¹Charité - Univ.smedizin Berlin, Berlin, Germany, ²Univ. Med. Ctr. Hamburg-Eppendorf, Hamburg, Germany
- 357 EXTRACELLULAR VESICLE MICRORNA CROSSTALK BETWEEN EQUINE CHONDROCYTES AND SYNOVIOCYTES - AN IN VITRO APPROACH C. I. Castanheira¹, J. R. Anderson¹, E. J. Clarke¹, S. E. Taylor², M. Hackl³, P. Clegg¹, V. James⁴, M. J. Peffers, ¹Univ. of Liverpool, Liverpool, United Kingdom, ²The Univ. of Edinburgh, Edinburgh, United Kingdom, ³TAmiRNA, Vienna, Austria, ⁴Univ. of Nottingham, Nottingham, United Kingdom
- 358 ROLE OF CONNEXIN43 AND PURINERGIC SIGNALING IN MODULATING CELLULAR SENESCENCE IN OSTEOARTHRITIS M. Varela-Eirin, J. Nehme², M. Mayan¹, M. Demaria², ¹Inst. de Investigación Biomédica de A Coruña (INIBIC), A Coruña, Spain, ²European Res. Inst. for the Biology of Ageing (ERIBA), Univ. Med. Ctr. Groningen (UMCG), Univ. of Groningen (RUG), Groningen, Netherlands

- 359 SPECIMEN-SPECIFIC COMPUTATIONAL MODELING OF SHEAR INJURY DEMONSTRATES A STRESS-BASED DECLINE IN OXIDATIVE DAMAGE AND MITOCHONDRIAL CONTENT AFTER ANTIOXIDANT TREATMENT N. Szabo, S. Liman, M. R. Hines, M. J. Brouillette, J. E. Johnson, M. C. Coleman, J. E. Goetz, Univ. of Iowa, Iowa City, IA
- 360 ENHANCING OXIDATIVE PHOSPHORYLATION THROUGH INHIBITION OF PDK2 ALLEVIATES CARTILAGE DEGRADATION IN A SURGICAL MODEL OF OSTEOARTHRITIS J. Han, Y. Kim¹, Y. Kim¹, S. Lee¹, Y. Park¹, D. Park², S. Han¹, ¹Kyungpook Natl. Univ., Daegu, Korea, Republic of, ²Ulsan Univ. Hosp., Ulsan, Korea, Republic of
- 361 A DEVELOPMENTAL BIOLOGY INSPIRED OSTEOARTHRITIS 3D IN VITRO MICRO-CARTILAGE MODEL TO STUDY EFFECTS OF PRO-ANABOLIC AND ANTI-INFLAMMATORY FACTORS ON TISSUE HOMEOSTASIS L. Dönges, M. Schönenberger², T. Bock³, C. Egloff⁴, I. Martin¹, A. Barbero¹, ¹Dept. of Biomedicine, Univ. Hosp. Basel, Basel, Switzerland, ²Nano Imaging Lab, Swiss NanoSci. Inst., Univ. of Basel, Basel, Switzerland, ³Proteomics Core Facility, Biozentrum, Univ. of Basel, Basel, Switzerland, ⁴Dept. of Orthopaedic surgery and Traumatology, Univ. Hosp. Basel, Basel, Switzerland
- 362 ASSOCIATION OF SUSTAINED SYSTEMIC NAD⁺ LEVELS WITH PROTECTIVE EFFECT OF CD38 DEFICIENCY IN A POST-TRAUMATIC OA MODEL IN MICE P. Gil Alabarse¹, M. Migaud², R. Liu-Bryan³, ¹VASDHS, San Diego, CA, ²University of South Alabama, Mobile, AL, ³UCSD and VASDHS, San Diego, CA
- 362 EXPRESSION AND REGULATION OF RECENTLY DISCOVERED HYALURONIDASES (HYBID AND TMEM2) IN CHONDROCYTES FROM KNEE OA CARTILAGE J. SHIOZAWA², S. de Vega², C. Yoshinaga², X. Ji³, Y. Negishi¹, m. momoeda¹, T. Nakamura⁴, H. Yoshida⁴, H. Kaneko¹, M. Ishijima^{1,2}, Y. Okada², ¹Dept. of Med. for Orthopaedics and Motor Organ, Juntendo Univ. Graduate Sch. of Med., Tokyo, Japan, ²Dept. of Pathophysiology for Locomotive Diseases, Juntendo Univ. Graduate Sch. of Med., Tokyo, Japan, ³Sportology center, Juntendo Univ., Tokyo, Japan, ⁴Biological Sci. Res., Kao Corp., Odawara-shi, Japan
- 364 METABOLIC PHENOTYPES REFLECT PATIENT INJURY STATUS: A CROSS-SECTIONAL ANALYSIS H. Welhaven, A. Welfley¹, P. Pershad², J. Satalich², R. O'Connell², A. Vap², R. June¹, ¹Montana State Univ., Bozeman, MT, ²Virginia Commonwealth Univ., Richmond, VA
- 365 LIPID PEROXIDATION REGULATES MITOCHONDRIA AND DOWNSTREAM OXIDANT PRODUCTION IN ARTICULAR CHONDROCYTES M. R. Hines, P. C. Gomez-Contreras¹, S. N. Rodman, III¹, S. Liman¹, D. C. Fredricks¹, H. Van Remmen², J. E. Goetz¹, M. C. Coleman¹, ¹The Univ. of Iowa, Iowa City, IA, ²The Univ. of Oklahoma, Oklahoma City, OK
- 366 ASSOCIATION BETWEEN SYNOVIAL TISSUE METABOLOMIC PROFILE AND PAIN IN PATIENTS WITH KNEE OSTEOARTHRITIS J. D. Murillo Saich, R. Coras¹, R. S. Meyer², A. Cutuk², K. Eschelbach³, N. Banka³, E. Quesada-Masachs³, N. E. Lane⁴, M. Guma^{1,5}, ¹Univ. of California San Diego, La Jolla, CA, ²San Diego VA Hlth.care Service, San Diego, CA, ³La Jolla Inst. for Immunology, La Jolla, CA, ⁴Univ. of California Davis, Davis, CA, ⁵San Diego VA Hlth.care Service, San Diego, CA, United States, San Diego, CA
- 367 EXTRACELLULAR VESICLE PEPTIDES INDICATE SEVERITY OF KNEE RADIOGRAPHIC OSTEOARTHRITIS X. Zhang, S. Ma², S. I. Naz², E. J. Soderblom¹, C. Aliferis², V. B. Kraus¹, ¹Duke Univ. Sch. of Med., CHAPEL HILL, NC, ²Univ. of Minnesota Sch. of Med., Minneapolis, MN
- 368 TEMPORAL PROTEOMIC LANDSCAPE OF PLASMA AND SYNOVIAL FLUID DERIVED EXTRACELLULAR VESICLES USING AN EXPERIMENTAL MODEL OF EQUINE OSTEOARTHRITIS J. Anderson¹, R. Jenkins¹, T. Welting², D. Green¹, E. Johnson¹, S. Jacobsen³, M. J. Peffers, ¹Univ. of Liverpool, Liverpool, United Kingdom, ²Maastricht Univ. Med. Ctr., Maastricht, Netherlands, ³Univ. of Copenhagen, Copenhagen, Denmark
- 369 DISCOVERY OF INCREASED PRODUCTION OF HISTONE VARIANT H3.3 AND CHARACTERIZATION OF ITS ASSOCIATED POST-TRANSLATIONAL MODIFICATIONS IN OSTEOARTHRITIS C. Núñez-Carro, V. Calamia, P. Fernández-Puente, M. Blanco-Blanco, P. Quaranta, T. Hermida-Gómez, C. Ruiz-Romero, F. J. Blanco, M. C. de Andrés, Inst. de Investigación Biomédica de A Coruña (INIBIC), A Coruña, Spain
- 370 EPIGENETIC DYSREGULATION DURING THE OA PROGRESSION IN HIP FAI T. Kamenaga, J. Shen, M. Wu, R. H. Brophy, R. J. O'Keefe, J. C. Clohisy, C. Pascual-Garrido, Washington Univ., St. Louis, MO
- 371 PPAR γ PROMOTER DEMETHYLATION RESCUES ARTICULAR CHONDROCYTES FROM CATABOLIC STATE IN HIP FAI T. Kamenaga, J. Shen, M. Wu, R. H. Brophy, R. J. O'Keefe, J. C. Clohisy, C. Pascual-Garrido, Washington Univ., St. Louis, MO

- 372 REGULATORY NETWORKS OF DIFFERENTIALLY EXPRESSED PROTEINS IN BLOOD OF OSTEOARTHRITIS PATIENTS BASED ON DATA-INDEPENDENT ACQUISITION PROTEOMICS TECHNOLOGY A. He, Y. Jiang², L. Han^{2,3}, R. Zhang¹, ¹Shaanxi Univ. of Chinese Med., Xianyang, China, ²Sch. of Publ. Hlth., Xi'an Jiaotong Univ. Hlth.Sci. Ctr., Xi'an, China, ³Disease Control and Prevention Div., Shaanxi Provincial Hlth.Commission, Xi'an, China
- 373 ESTABLISHMENT OF REGULATORY NETWORKS OF CARTILAGE SPECIFIC DIFFERENTIALLY EXPRESSED PROTEINS IN OSTEOARTHRITIS X. Zhao, L. Han^{2,3}, Y. Jiang², R. Zhang¹, ¹Shaanxi Univ. of Chinese Med., Xianyang, China, ²Sch. of Publ. Hlth., Xi'an Jiaotong Univ. Hlth.Sci. Ctr., Xi'an, China, ³Disease Control and Prevention Div., Shaanxi Provincial Hlth.Commission, Xi'an, China
- 374 CONSTRUCTION OF MECHANISM NETWORKS OF DIFFERENTIALLY EXPRESSED PROTEINS FROM CARTILAGE TISSUES IN OSTEOARTHRITIS J. Hao, L. Han^{2,3}, Y. Jiang², R. Zhang¹, ¹Shaanxi Univ. of Chinese Med., Xianyang, China, ²Sch. of Publ. Hlth., Xi'an Jiaotong Univ. Hlth.Sci. Ctr., Xi'an, China, ³Disease Control and Prevention Div., Shaanxi Provincial Hlth.Commission, Xi'an, China
- 375 SUPPORTIVE EVIDENCE FOR THE POTENTIAL FOR NOVEL BIODISCOVERY IN OSTEOARTHRITIS THROUGH THE STEPUP OA CONSORTIUM T. A. Perry, Y. Deng¹, P. Hulley¹, R. A. Maciewicz¹, J. Mitchelmore², D. Perry³, S. Larsson⁴, S. Lemire², A. Struglics⁴, C. T. Appleton⁵, S. Kluzek¹, N. K. Arden¹, D. T. Felson^{6,7}, B. Marsden¹, B. D. Tom⁸, L. Bondi⁸, M. Kapoor⁹, V. Kumar¹, L. S. Lohmander⁴, T. J. Welting¹⁰, D. A. Walsh¹¹, A. M. Valdes¹¹, L. Jostins-Dean¹, F. E. Watt^{1,12}, T. L. Vincent¹, for the STEpUP OA Consortium, ¹Nuffield Dept. of Orthopaedics, Rheumatology, and Musculoskeletal Sci., Univ. of Oxford, Oxford, United Kingdom, ²Novartis Inst.s for BioMed. Res., Basel, Switzerland, ³SomaLogic, Boulder, CO, ⁴Faculty of Med., Dept. of Clinical Sci. Lund, Orthopaedics, Lund Univ., Lund, Sweden, ⁵Dept.s of Med., and Physiology and Pharmacology, Univ. of Western Ontario, London, ON, Canada, ⁶Univ. of Manchester and the NIHR, Manchester Musculoskeletal BioMed. Res. Ctr., Manchester, United Kingdom, ⁷Boston Univ. Sch. of Med., Boston, MA, ⁸MRC Biostatistics Unit, Univ. of Cambridge, Cambridge, United Kingdom, ⁹Schroeder Arthritis Inst., Krembil Res. Inst., Univ. Hlth.Network, Toronto, ON, Canada, ¹⁰Lab. for Experimental Orthopedics, Dept. of Orthopedic Surgery, Maastricht Univ., Maastricht, Netherlands, ¹¹NIHR Nottingham BioMed. Res. Ctr., Sch. of Med., Univ. of Nottingham, Nottingham, United Kingdom, ¹²Dept. of Immunology and Inflammation, Imperial Coll, London, United Kingdom
- 376 CHARACTERISATION OF DISTINCT CHONDROCYTE CLUSTERS THAT EMERGE IN RESPONSE TO CARTILAGE INJURY - A SINGLE NUCLEI RNA-SEQ ANALYSIS L. Zhu, L. Koneva, S. Sansom, T. L. Vincent, Kennedy Inst. of Rheumatology, Univ. of Oxford, Oxford, United Kingdom
- 377 STRATIFICATION OF KNEE OSTEOARTHRITIS BASED ON CELL-INTEGRATED SYNOVIAL FLUID-INDUCED SIGNALING PATTERNS B. A. Housmans¹, M. Neefjes², D. Green³, A. Cremers¹, L. W. van Rhijn⁴, P. J. Emans⁴, T. A. Boymans⁴, P. M. van der Kraan², G. G. van den Akker, T. J. Welting¹, ¹Maastricht Univ., Maastricht, Netherlands, ²RadboudUMC, Nijmegen, Netherlands, ³Univ. of Liverpool, Liverpool, United Kingdom, ⁴Maastricht Univ. Med. Ctr., Maastricht, Netherlands
- 378 THE PROTEOLYTIC LANDSCAPE OF HEALTHY JUVENILE BOVINE KNEE CARTILAGE AND SYNOVIAL FLUID AS A COMPARATIVE RESOURCE FOR THE HUMAN OSTEOARTHRITIS DEGRADOME S. Bhutada, S. Apte, Cleveland Clinic, Lerner Res. Inst. and Orthopedic and Rheumatologic Inst., Cleveland, OH
- 379 PROTEOMIC PROFILING OF MENISCUS FROM MILD JOINT DEGENERATION DONORS AND END-STAGE OSTEOARTHRITIS IN COMPARISON WITH HEALTHY CONTROLS USING DATA-INDEPENDENT ACQUISITION MASS SPECTROMETRY R. Paz Gonzalez^{1,2}, A. Turkiewicz³, C. Ruiz-Romero^{1,2}, N. Ali³, F. Blanco^{1,2}, M. Englund³, P. Onnerfjord³, ¹INIBIC-Hosp. Univ., A Corun?a, Spain, ²Univ. de A Coruña, A Corun?a, Spain, ³Clinical Sci., Lund Univ., Lund, Sweden
- 380 METABOLOMIC APPROACH IN OSTEOARTHRITIC PATIENTS AFTER ITIS DIET INTERVENTION J. D. Murillo Saich, H. Mannocho-Russo², R. Coras¹, M. Sala-Climent¹, M. Cedeno¹, A. Quan³, M. K. Hose³, E. Gentry², N. E. Lane⁴, P. Dorrestein², M. Guma^{1,5}, ¹Univ. of California San Diego, La Jolla, CA, ²Univ. of California San Diego, Collaborative Mass Spectrometry Innovation Ctr., La Jolla, CA, ³V.A. San Diego Hlth.care System, San Diego, CA, ⁴Univ. of California Davis, Davis, CA, ⁵V.A. San Diego Hlth.care System, San Diego, CA, United States, San Diego, CA

- 382 INTEGRATION OF MULTI ANCESTRY OSTEOARTHRITIS GENETIC ASSOCIATION FINDINGS, IN SILICO TRANSCRIPTOMICS AND DRUG REPURPOSING HIGHLIGHTS MECHANISM FOR EFFICACY OF ANTI-EPILEPTICS FOR OSTEOARTHRITIS PAIN M-L. N. McDonald², P. Lakshman Kumar^{1,2}, V. Srinivasasainagendra^{1,2}, A. Nair^{1,2}, A. Rocco¹, A. C. Wilson¹, J. Chiles¹, J. Richman^{1,2}, S. A. Pinson¹, R. Dennis³, V. Jagadale³, C. Brown^{4,2}, S. Pyarajan⁵, H. K. Tiwari¹, M. Bamman^{6,2}, J. Singh^{1,2}, ¹Univ. of Alabama at Birmingham, Birmingham, AL, ²Birmingham VA Hlth.care System, Birmingham, AL, ³Central Arkansas Veterans Hlth.care System, Little Rock, AR, ⁴Louisiana State Univ. Hlth.Sci. Ctr., New Orleans, LA, ⁵VA Boston Hlth.Care, Boston, MA, ⁶Florida Inst. for Human & Machine Cognition,, Pensacola, FL
- 383 RNA-BINDING PROTEINS THAT ARE HIGHLY EXPRESSED AND ENRICHED IN HEALTHY CARTILAGE BUT SUPPRESSED IN OSTEOARTHRITIS AS CANDIDATE THERAPEUTIC TARGETS H. Swahn, K. Myers, M. K. Lotz, Molecular Med., Scripps Res. Inst., La Jolla, CA
- 384 CHARACTERIZATION OF PROTEOMIC SIGNATURES IN OSTEOARTHRITIS PATIENTS WITH ALTERED METABOLISM, INFLAMMAGING AND ACCELERATED AGING. P. Quaranta¹, P. Fernández-Puente², C. Ruiz-Romero¹, L. Lourido-Salas¹, R. Paz-González¹, N. Oreiro³, M. Silva-Diaz³, M. Freire³, M. Crespo³, J. Díaz³, E. Míguez Rey³, A. Mena de Cea³, A. Soto³, G. Vázquez³, F. Blanco⁴, V. Calamia, ¹Inst. de Investigación Biomédica de A Coruña (INIBIC), Coruña (A), Spain, ²Univ.e da Coruña (UDC), Coruña (A), Spain, ³Complexo Hosp.ario Univ.rio de A Coruña (CHUAC), Coruña (A), Spain, ⁴Complexo Hosp.ario Univ.rio de A Coruña (CHUAC), Univ.e da Coruña (UDC), La Coruña, Spain
- 385 PERIOSTIN IS A SYNOVIAL FLUID BIOMARKER FOR ANTERIOR CRUCIATE LIGAMENT INJURY IN HUMANS AND DOGS H. Reesink, S. Womack¹, C. Carballo², S. Rodeo², ¹Cornell Univ., Ithaca, NY, ²Hosp. for Special Surgery, New York City, NY
- 386 POTENTIAL ROLE OF LRRC15-EXPRESSING FIBROBLASTS IN INFRAPATELLAR FAT PAD FIBROSIS IN KNEE OSTEOARTHRITIS P. Singh, D. Oliver, S. G. Lessard, S. J. Green, P. K. Sculco, S. A. Rodeo, T. Pannellini, S. Goodman, B. Mehta, M. Otero, Hosp. for Special Surgery, NEW YORK, NJ
- 387 OSTEOARTHRITIC CHONDROCYTES UNDERGO A GLYCOLYSIS-RELATED METABOLIC SWITCH UPON EXPOSURE TO IL-1? OR TNF-? A. Defois, Jr.1, N. Bon, Jr.1, A. Charpentier, Jr.1, M. Georget, Jr.1, F. Blanchard, Sr.1, A. Hamel, Sr.1, D. Waast, Sr.1, J. Armengaud, Sr.2, O. Renoult1, C. Pecqueur, Sr.1, Y. Maugars, Sr.1, M-A. Boutet, Jr.1,3, J. Guicheux, Sr.1, C. Vinatier, Sr., ¹Nantes Université, Nantes, France, ²Université Paris-Saclay, Bagnols-sur-Cèze, France, ³Queen Mary Univ. of London, London, United Kingdom
- 388 GUT FUNGAL DYSBIOSIS AND ALTERED FUNGI-BACTERIA CORRELATION NETWORK WERE ASSOCIATED WITH KNEE SYNOVITIS IN A MIDDLE-AGED AND OLDER GENERAL POPULATION IN CHINA T. Jiang,^{2,3,4}, K. Liu¹, Y. Zhang^{5,6}, W. Zhang^{3,4}, M. Doherty^{3,4}, T. Yang^{3,4,7}, J. Li¹, Q. Weng¹, J. Wei^{7,8}, C. Zeng^{1,8,9}, G. Lei^{1,8,9}, ¹Dept. of Orthopaedics, Xiangya Hosp., Central South Univ., Changsha, China, ²Dept. of Ultrasonography, Xiangya Hosp., Central South Univ., Changsha, China, ³Academic Rheumatology, Sch. of Med., Univ. of Nottingham, Nottingham, United Kingdom, ⁴Pain Ctr. Versus Arthritis UK, Nottingham, United Kingdom, ⁵Div. of Rheumatology, Allergy, and Immunology, Dept. of Med., Massachusetts Gen. Hosp., Harvard Med. Sch., Boston, MA, ⁶The Mongan Inst., Massachusetts Gen. Hosp., Harvard Med. Sch., Boston, MA, ⁷Hlth.Management Ctr., Xiangya Hosp., Central South Univ., Changsha, China, ⁸Hunan Key Lab. of Joint Degeneration and Injury, Xiangya Hosp., Central South Univ., Changsha, China, ⁹Natl. Clinical Res. Ctr. for Geriatric Disorders, Xiangya Hosp., Central South Univ., Changsha, China
- 389 EPIGENETIC SIGNATURE ASSOCIATION WITH PAIN RESPONSE FOLLOWING SURGICAL INTERVENTION FOR LUMBAR SPINAL STENOSIS DUE TO SPINE OSTEOARTHRITIS N. Fine, S. Lively, M. Kapoor, R. Y. Rampersaud, UHN, Toronto, ON, Canada
- 390 EPIGENOME-WIDE ANALYSIS OF OSTEOARTHRITIS IN THE MULTICENTER OSTEOARTHRITIS STUDYEPIGENOME-WIDE ANALYSIS OF OSTEOARTHRITIS IN THE MULTICENTER OSTEOARTHRITIS STUDY M. S. Yau, P. C. Okoro¹, I. K. Haugen², J. A. Lynch³, M. C. Nevitt³, C. E. Lewis⁴, J. Torner⁵, D. T. Felson⁶, ¹Hebrew SeniorLife, Boston, MA, ²Diakonhjemmet Hosp., Oslo, Norway, ³Univ. of California San Francisco, San Francisco, CA, ⁴Univ. of Alabama at Birmingham, Birmingham, AL, ⁵Univ. of Iowa, Iowa City, IA, ⁶Boston Univ., Boston, MA

- 391 THE ASSOCIATION OF GENDER ROLE EXPECTATIONS OF PAIN SENSITIVITY AND PSYCHOPHYSICAL MEASURES OF PAIN SENSITIZATION IN PEOPLE WITH KNEE OSTEOARTHRITIS Y. Neelapala, L. Carlesso, McMaster Univ., Hamilton, ON, Canada
- 392 IS HIP CAPSULE MORPHOLOGY ASSOCIATED WITH HIP PAIN IN PATIENTS WITHOUT ANOTHER STRUCTURAL CORRELATE? J. Luitjens, F. Gassert¹, V. Patwardhan², G. Joseph¹, J. Lynch¹, S. Majumdar¹, T. Link¹, R. Bhattacharjee¹, 1UCSF, San Francisco, CA, 2Univ. of Hawai'i, Honolulu, HI
- 393 ASSOCIATIONS BETWEEN PAIN SENSITIZATION AND MEASURES OF PHYSICAL FUNCTION IN PEOPLE WITH HAND OSTEOARTHRITIS: RESULTS FROM THE NOR-HAND STUDY M. Gløersen², P. Steen Pettersen¹, T. Neogi³, T. Kvien^{1,2}, H. Berner Hammer^{1,2}, I. Haugen¹, 1Diakonhjemmet Hosp., Oslo, Norway, 2Univ. of Oslo, Oslo, Norway, 3Boston Univ. Sch. of Med., Boston, MA
- 394 CO-FLUCTUATIONS OF KNEE PAIN BETWEEN KNEES: DATA FROM THE OSTEOARTHRITIS INITIATIVE M. Englund¹, T. Neogi², A. Turkiewicz, 1Lund Univ., Lund, Sweden, 2Boston Univ. Sch. of Med., Boston, MA
- 395 ASSOCIATION OF QUANTITATIVE SENSORY TESTING OF PAIN SENSITIZATION WITH PERSISTENT HAND PAIN IN PEOPLE WITH HAND OSTEOARTHRITIS: LONGITUDINAL ANALYSES FROM THE NOR-HAND STUDY P. Steen Pettersen, T. Neogi², E. Mulrooney^{1,3}, M. Gløersen^{1,3}, H. B. Hammer^{1,3}, I. K. Haugen¹, 1Diakonhjemmet Hosp., Oslo, Norway, 2Boston Univ. Sch. of Med., Boston, MA, 3Univ. of Oslo, Oslo, Norway
- 396 THE CORRELATIONS BETWEEN THE PAIN SENSITIVITY QUESTIONNAIRE AND QUANTITATIVE SENSORY TESTING AND THEIR ASSOCIATIONS WITH PAIN IN PERSONS WITH HAND OSTEOARTHRITIS P. Steen Pettersen, T. Neogi², E. Mulrooney¹, M. Gløersen¹, H. B. Hammer^{1,3}, I. K. Haugen¹, 1Diakonhjemmet Hosp., Oslo, Norway, 2Boston Univ. Sch. of Med., Boston, MA, 3Univ. of Oslo, Oslo, Norway
- 397 THE FEATURES OF BODY COMPOSITION IN POSTMENOPAUSAL WOMEN WITH CHRONIC KNEE PAIN N. Grygorieva, A. Musiienko, M. Bystrytska, N. Zaverukha, D. F. Chebotarev State Inst. of Gerontology NAMS of Ukraine, Kyiv, Ukraine
- 398 ASSOCIATION BETWEEN INSULIN RESISTANCE AND PAIN SEVERITY IN PARTICIPANTS WITH EARLY-STAGE KNEE OSTEOARTHRITIS AND BONE MARROW ABNORMALITY -DATA FROM THE BUNKYO HEALTH STUDY M. Yokoyama, H. Kaneko^{2,3}, L. Liu^{1,2}, A. Adili^{1,2,3}, J. Tomura^{2,3}, S. Wakana^{2,3}, Y. Machiyama^{2,3}, T. Yamamura^{2,3}, Y. Tamura^{1,4}, M. Kubota^{2,3}, M. Ishijima^{1,2,3}, 1Sportology Ctr., Juntendo Univ. Graduate Sch. of Med., Tokyo, Japan, 2Dept. of Orthopaedics, Juntendo Univ., Faculty of Med., Tokyo, Japan, 3Dept. of Med. for Orthopaedics and Motor Organ, Juntendo Univ. Graduate Sch. of Med., Tokyo, Japan, 4Dept. of Metabolism & Endocrinology, Juntendo Univ., Faculty of Med., Tokyo, Japan
- 399 ASSOCIATION BETWEEN NEGATIVE BACK BELIEFS AND DEVELOPMENT OF HIGH-INTENSITY PAIN OR PAIN-RELATED DISABILITY IN COMMUNITY-BASED MEN: A 10-YEAR PROSPECTIVE COHORT STUDY M. Estee, Y. Wang¹, S. Heritier¹, D. Urquhart¹, F. Cicuttini¹, M. Kotowicz², S. Brennan-Olsen³, J. Pasco², A. Wluka¹, 1Monash Univ., Melbourne, Australia, 2Deakin Univ., Geelong, Australia, 3Australian Inst. for Musculoskeletal Sci., Western Hlth.and Univ. of Melbourne, Melbourne, Australia
- 400 CONSTRUCT VALIDITY OF THE CORE SET OF PERFORMANCE-BASED TESTS RECOMMENDED BY THE OSTEOARTHRITIS RESEARCH SOCIETY INTERNATIONAL (OARSI) FOR SUBJECTS WITH KNEE OSTEOARTHRITIS. V. B. Montilha, R. B. Ramalho, N. A. Casonato, S. M. Mattiello, L. A. Selistre, Federal Univ. of São Carlos, São Carlos, Brazil
- 401 PAIN DEVELOPMENT AND GOOD CLINICAL OUTCOME IN HAND OSTEOARTHRITIS OVER 4 YEARS C. van der Meulen, L. A. van de Stadt, S. J. Buck, F. R. Rosendaal, M. Kloppenburg, LUMC, Leiden, Netherlands
- 402 ARE BODY FAT MASS AND LEAN MASS ASSOCIATED WITH PRESSURE HYPERALGESIA IN INDIVIDUALS WITH KNEE OSTEOARTHRITIS? M. Gyaraki da Silva, P. J. Francisco Venturini, N. Aparecida Casonato, F. E. Sette, J. B. Ayla, S. M. Mattiello, Federal Univ. of São Carlos, São Carlos, Brazil
- 403 ASSOCIATION BETWEEN BONE MINERAL DENSITY AND DEVELOPMENT OF HIGH-INTENSITY PAIN OR PAIN-RELATED DISABILITY IN COMMUNITY-BASED MEN: A 10-YEAR PROSPECTIVE COHORT STUDY M. Estee, Y. Wang¹, S. Heritier¹, D. Urquhart¹, F. Cicuttini¹, M. Kotowicz², K. Anderson², S. Brennan-Olsen³, J. Pasco², A. Wluka¹, 1Monash Univ., Melbourne, Australia, 2Deakin Univ., Melbourne, Australia, 3Australian Inst. for Musculoskeletal Sci., Western Hlth.and Univ. of Melbourne, Melbourne, Australia

- 404 COMPARATIVE EFFECTIVENESS OF REMOTELY DELIVERED BIOPSYCHOSOCIAL INTERVENTIONS FOR THE TREATMENT OF OSTEOARTHRITIC PAIN. A NETWORK META - ANALYSIS D. V. Pouliopoulou, T. V. Pereira², G. Nazari³, J. C. MacDermid^{1,4}, P. Bobos¹, ¹Univ. of Western Ontario, London, ON, Canada, ²Univ. of Leicester, Leicester, United Kingdom, ³Queens Univ., Kingston, ON, Canada, ⁴Roth | McFarlane Hand and Upper Limb Ctr., St. Joseph's Hosp., London, ON, Canada
- 405 NON-INVASIVE RUPTURE AND SURGICAL TRANSECTION OF ACL MODELS PRODUCE UNIQUE GAIT PATTERNS IN RODENTS T. O. Ajayi, K. D. Allen, B. Sharma, Univ. of Florida, Gainesville, FL
- 406 GAIT AND CHANGES IN NOCICEPTIVE FUNCTION OVER 2-YEARS IN PEOPLE WITH KNEE OSTEOARTHRITIS: THE MULTICENTER OSTEOARTHRITIS STUDY D. Kumar, N. Wang², K. Torabian¹, S. Lee¹, L. Frey-Law³, L. C. Carlesso⁴, J. M. Hausdorff⁵, E. Gazit⁵, K. E. Costello¹, C. L. Lewis¹, J. J. Stefanik⁶, N. A. Segal⁷, C. E. Lewis⁸, M. C. Nevitt⁹, T. Neogi¹⁰, ¹Boston Univ., Boston, MA, ²Boston Univ. Sch. of Publ. Hlth., Boston, MA, ³Univ. of Iowa, Iowa City, IA, ⁴McMaster Univ., Hamilton, ND, Canada, ⁵Tel Aviv Sourasky Med. Ctr., Tel Aviv, Israel, ⁶Northeastern Univ., Boston, MA, ⁷Univ. of Kansas, Kansas City, KS, ⁸Univ. of Alabama at Birmingham, Birmingham, AL, ⁹Univ. of California, San Francisco, San Francisco, CA, ¹⁰Boston Univ. Sch. of Med., Boston, MA
- 407 GREEN LIGHT THERAPY REDUCES MECHANICAL PAIN IN A RAT MODEL OF OSTEOARTHRITIS BY ACTIVATING THE ENDOCANNABINOID SYSTEM M. S. O'Brien, C. DeBow, J. J. McDougall, Dalhousie Univ., Halifax, NS, Canada
- 408 EFFECTS OF EXERCISE ON INDICES OF CENTRAL SENSITISATION IN HUMANS: A SYSTEMATIC REVIEW AND NETWORK META-ANALYSIS A. Abd Elkhabir^{1,2}, D. F. McWilliams^{1,3}, S. Smith¹, W. Chaplin^{3,1}, M. Salimian⁴, V. Georgopoulos¹, A. Kouraki³, D. A. Walsh^{3,5}, ¹Pain Ctr. Versus Arthritis, Univ. of Nottingham, Nottingham, United Kingdom, ²Rheumatology and Rehabilitation Dept., Mansoura Univ., Mansoura, Egypt, ³Nottingham NIHR BioMed. Res. Ctr., Univ. of Nottingham, Nottingham, United Kingdom, ⁴Univ. of Nottingham, Nottingham, United Kingdom, ⁵Sherwood Forest Hosp. NHS Fndn. Trust, Sutton-in-Ashfield,, Nottingham, United Kingdom
- 409 NO PAIN, NO GAIN: ASSOCIATION OF PAIN INCREASE DURING EXERCISE WITH EXERCISE-INDUCED HYPOALGESIA IN PEOPLE WITH KNEE OSTEOARTHRITIS. S. Lee, T. Neogi², B. M. Senderling¹, M. Gheller¹, L. Adamowicz³, P. Georgiev³, L. Viktrup⁴, C. Demanuele³, P. Wacnik³, D. Kumar^{1,5}, ¹Boston Univ., Boston, MA, ²Boston Univ. Med. Campus, Boston, MA, ³Pfizer Inc., Cambridge, MA, ⁴Eli Lilly and Company, Indianapolis, IN, ⁵Boston Univ. Sch. of Med., Boston, MA
- 410 KNEE OSTEOARTHRITIS IS ASSOCIATED WITH ELEVATED CD68 POSITIVE CELLS IN DORSAL ROOT GANGLIA IN HUMANS D. Amanitis¹, M. Shahtaheri¹, R. Hill², D. Wilson², D. F. McWilliams¹, D. A. Walsh, ¹Univ. of Nottingham, Nottingham, United Kingdom, ²Sherwood Forest Hosp. NHS Fndn. Trust, Mansfield, United Kingdom
- 411 RECOGNIZING NOCIPLASTIC AND NEUROPATHIC PAIN IN PATIENTS WITH ANTERIOR CRUCIATE LIGAMENT AND MENISCAL INJURIES C. A. Conran, J. Seifert, A. Clauw, M. Boublik, L. Favazzo, R. M. Frank, J. Genuario, B. Mayer, E. McCarty, M. Wolcott, M. Zuscik, The University of Colorado Interdisciplinary JointBiology Program (IJB) consortium, L. W. Moreland, Univ. of Colorado Anschutz Med. Campus, Denver, CO
- 412 NEUROBIOLOGY OF OSTEOARTHRITIS - A SYSTEMATIC REVIEW AND ACTIVATION LIKELIHOOD ESTIMATION META-ANALYSIS M. Hall, F. Dobson¹, D. Klyne², C. Zheng¹, Y. Lima³, N. Egorova-Brumley¹, ¹Univ. of Melbourne, Melbourne, Australia, ²Univ. of Queensland, Brisbane, Australia, ³Griffith Univ., Gold Coast, Australia
- 413 IDENTIFICATION OF BIOMARKERS IN CEREBROSPINAL FLUID ASSOCIATED WITH OA PAIN C. Martin Gil, J. Drylewicz¹, H. Smits¹, N. Wolterbeek², M. van Dijk², F. P. Lafeber^{1,1}, S. C. Mastbergen^{1,1}, N. Eijkelkamp¹, ¹Univ. Med. Ctr. Utrecht, Utrecht, Netherlands, ²Antonius Ziekenhuis, Utrecht, Netherlands
- 414 MULTIMODAL QUANTITATIVE SENSORY TESTING AND CLINICAL CHARACTERISTICS OF WOMEN WITH EARLY- AND END-STAGE CARPOMETACARPAL OSTEOARTHRITIS T. Ordóñez Diaz, Y. Cruz-Almeida, T. W. Wright, J. A. Nichols, Univ. of Florida, Gainesville, FL
- 415 RELATIONSHIPS BETWEEN SLEEP QUALITY AND HIP PAIN SEVERITY IN PEOPLE WITH HIP OSTEOARTHRITIS T. Haber, F. Dobson, R. S. Hinman, K. Allison, K. Bennell, L. Spiers, G. Knox, M. Hall, Univ. of Melbourne, Carlton, Australia

- 416 COMPARING EFFECTS OF KNEE OSTEOARTHRITIS EDUCATIONAL INFORMATION, WITH AND WITHOUT PATHOANATOMICAL CONTENT, ON CONSUMER OSTEOARTHRITIS MANAGEMENT BELIEFS: AN ONLINE RANDOMISED CONTROLLED TRIAL B. J. Lawford, K. L. Bennell, M. Hall, T. Egerton, S. Filbay, F. McManus, K. Lamb, R. S. Hinman, The Univ. of Melbourne, Melbourne, Australia
- 417 DIGITAL TREATMENT FOR SUBACROMIAL SHOULDER PAIN: PRELIMINARY RESULTS FROM AN OBSERVATIONAL COHORT STUDY H. Nero^{1,2}, F. Eek¹, T. Wörner¹, H. Hörder¹, P. Sirard², M. Misini Ignjatovic², L. E. Dahlberg, ¹Lund Univ., Lund, Sweden, ²Joint Academy, Malmö, Sweden
- 418 DOES PHYSICAL ACTIVITY CONFOUND RACE DIFFERENCES IN OSTEOARTHRITIS-RELATED FUNCTIONAL LIMITATION? E. R. Vina, C. Kwok², C. Villamil Grest¹, J. T. Jakiela³, T. Bye³, D. K. White³, ¹Temple Univ., Philadelphia, PA, ²Univ. of Arizona, Tucson, AZ, ³Univ. of Delaware, Newark, DE
- 419 DIGITALLY DELIVERED EXERCISE AND EDUCATION FOR PATIENTS WITH HAND OSTEOARTHRITIS - A REGISTRY-BASED OBSERVATIONAL STUDY P. Sirard¹, M. Walter², A. Kiadaliri^{3,1}, L. E. Dahlberg^{3,1}, S. L. Lohmander^{3,1}, H. Hörder³, H. Nero^{3,1}, M. Misini Ignjatovic¹, ¹Joint Academy, Malmö, Sweden, ²SRH Coll.s for Physiotherapy, Stuttgart, Germany, ³Lund Univ., Lund, Sweden
- 420 PATIENT ACCEPTABLE SYMPTOM STATE AND TREATMENT FAILURE FOR THE KNEE/HIP INJURY AND OSTEOARTHRITIS OUTCOME SCORE AND PAIN IN PATIENTS PARTICIPATING IN A DIGITALLY DELIVERED FIRST-LINE TREATMENT PROGRAM FOR HIP OR KNEE OSTEOARTHRITIS A. Cronström^{1,2}, L. Holm Ingelsrud³, H. Nero^{1,4}, S. L. Lohmander^{1,4}, L. E. Dahlberg⁴, A. Kiadaliri^{1,4}, ¹Lund Univ., Lund, Sweden, ²Umeå Univ., Umeå, Sweden, ³Copenhagen Univ. Hosp. Hvidovre, Copenhagen, Denmark, ⁴Joint Academy, Malmö, Sweden
- 421 CLINICAL OUTCOMES OF OSTEOARTHRITIS MANAGEMENT PROGRAMS: A PROJECT OF THE OA TRIAL BANK AND OARSJ JOINT EFFORT INITIATIVE USING INDIVIDUAL PARTICIPANT DATA J. P. Eyles, J. L. Bowden¹, A. Abbott², J. Abbott³, S. Bierma-Zeinstra⁴, L. Dahlberg⁵, K. Dziedzic⁶, M. van der Esch⁷, M. Holden⁶, E. Healey⁶, I. Holm⁸, M. Hurley⁹, C. Hutyra¹⁰, W. Jiranek¹⁰, T. Lentz¹⁰, G. L. Svensson¹¹, S. Lohmander⁵, M. Malay¹⁰, R. Mather, III¹⁰, M. van Middelkoop⁴, K. Miller¹², K. Miller¹³, T. Moseng¹⁴, H. Nero⁵, R. O'Connell¹, N. Østerås¹⁴, M. Risberg⁸, B. Tan¹⁵, V. Venkatesha¹⁶, D. Hunter¹, ¹Univ. of Sydney, Sydney, Australia, ²Linköping Univ., Linköping, Sweden, ³Univ. of Otago, Dunedin, New Zealand, ⁴Erasmus MC, Rotterdam, Netherlands, ⁵Lund Univ., Lund, Sweden, ⁶Keele Univ., Keele, United Kingdom, ⁷Univ. of Applied Sci., Amsterdam, Netherlands, ⁸Oslo Univ. Hosp., Oslo, Norway, ⁹Univ. of London and Kingston Univ., London, United Kingdom, ¹⁰Duke Univ., Durham, NC, ¹¹Univ. of Gothenburg, Gothenburg, Sweden, ¹²Gen. Internal Med. Facility, Madison, WI, ¹³Gen. Internal Med. Faculty, Madison, WI, ¹⁴Oslo Univ., Oslo, Norway, ¹⁵Natl. Hlth.care Group, Singapore, Singapore, ¹⁶Northern Sydney Local Hlth.District, Sydney, Australia
- 422 LARGE VARIABILITY IN RECOMMENDATIONS FOR RETURN TO DAILY LIFE ACTIVITIES INCLUDING WORK AND SPORT AFTER KNEE ARTHROPLASTY IN THE NETHERLANDS A. Straat, D. Smit², P. Coenen¹, G. Kerkhoffs¹, J. Anema¹, P. Kuijer¹, ¹Amsterdam UMC, Amsterdam, Netherlands, ²Rijksinstituut voor Volksgezondheid en Milieu, Utrecht, Netherlands
- 423 RECOMMENDATIONS FOR 27 ACTIVITIES OF DAILY LIFE INCLUDING WORK AND SPORT FOR PATIENTS WITH TOTAL OR UNICOMPARTMENTAL KNEE REPLACEMENT WITH FAST, AVERAGE AND SLOW RECOVERY RATES A. Straat, P. Coenen¹, D. Smit², G. Hulsege³, R. van Geenen⁴, G. Kerkhoffs¹, R. Janssen⁵, T. Boymans⁶, J. Huirne¹, J. Anema¹, P. Kuijer¹, ¹Amsterdam UMC, Amsterdam, Netherlands, ²Rijksinstituut voor Volksgezondheid en Milieu, Utrecht, Netherlands, ³The Netherlands Organization for Applied Scientific Res., TNO, Leiden, Netherlands, ⁴Amphia Hosp., Breda, Netherlands, ⁵Máxima Med. Ctr., Eindhoven, Netherlands, ⁶Maastricht UMC, Maastricht, Netherlands
- 424 PRELIMINARY EVALUATION OF A DIGITAL THERAPEUTIC FOR OSTEOARTHRITIS PATIENTS AWAITING KNEE OR HIP SURGERY, IN REMOTE AND RURAL COMMUNITIES L. E. Dahlberg², M. Misini Ignjatovic², H. Nero^{1,2}, T. Gorely³, J. Beastall⁴, A. Gibson⁴, J. Urquhart⁴, R. Hunter⁴, S. L. Lohmander^{1,2}, A. Giangreco³, ¹Lund Univ., Lund, Sweden, ²Joint Academy, Malmö, Sweden, ³Univ. of Highlands and Islands, Inverness, United Kingdom, ⁴NHS Highland, Inverness, United Kingdom

425	A QUALITATIVE STUDY ON THE PSYCHOSOCIAL FACTORS IN KNEE OSTEOARTHRITIS: INSIGHTS FROM AN ASIAN POPULATION	B. Tan, E. Woon ² , K. Griva ² , S-Y. Yang ¹ , ¹ Woodlands Hlth., Singapore, Singapore, ² Lee Kong Chian Sch. of Med., Singapore, Singapore
426	"I FEEL MORE CONFIDENT": A MIXED-METHODS EVALUATION OF THE INFLUENCE OF GOOD LIFE WITH OSTEOARTHRITIS DENMARK (GLA:D®) ON PHYSICAL ACTIVITY PARTICIPATION, CAPABILITY, BARRIERS AND FACILITATORS IN PEOPLE WITH KNEE OSTEOARTHRITIS.	E. C. Bell, P. O'Halloran ¹ , M. F. Pazzinatto ¹ , J. A. Wallis ^{2,1,3} , K. M. Crossley ¹ , J. L. Kemp ¹ , Z. Perraton ¹ , C. J. Barton ¹ , ¹ La Trobe Univ., Bundoora, Australia, ² Cabrini Hlth., Malvern, Australia, ³ Monash Univ., Melbourne, Australia
427	PATIENT ACCEPTABLE SYMPTOM STATE AND TREATMENT FAILURE THRESHOLD VALUES FOR WORK PRODUCTIVITY AND ACTIVITY IMPAIRMENT QUESTIONNAIRE AND EQ-5D-5L IN OSTEOARTHRITIS	A. Kiadaliri ^{1,2} , S. L. Lohmander ² , L. E. Dahlberg ^{1,2} , ¹ Lund Univ., Lund, Sweden, ² Arthro Therapeutics, Malmö, Sweden
428	ASSESSING THE IMPORTANCE OF PREDICTORS OF ADHERENCE TO A DIGITAL SELF-MANAGEMENT INTERVENTION FOR OSTEOARTHRITIS	A. Kiadaliri ^{1,2} , A. Dell'Isola ¹ , S. L. Lohmander ³ , D. J. Hunter ⁴ , L. E. Dahlberg ^{1,3} , ¹ Lund Univ., Lund, Sweden, ² Arthro Therapeutics, Malmö, Sweden, ³ Arthro Therapeutics, Malmö, Sweden, ⁴ Univ. of Sydney, Sydney, Australia
429	DISPARITIES IN HEALTHCARE OUTCOME MEASURES FOLLOWING ELECTIVE SURGERY FOR OSTEOARTHRITIS FROM 2004 TO 2018 IN ONTARIO, CANADA	M. Canizares, J. Power, A. Perruccio, C. Veillette, N. Mahomed, Y. Rampersaud, Schroeder Arthritis Inst.. Krembil Res. Inst.. Univ. Hlth.Network, Toronto, ON, Canada
430	DOES CONSULTING AN OCCUPATIONAL MEDICINE SPECIALIST DECREASE TIME TO RETURN TO WORK AMONG TOTAL KNEE ARTHROPLASTY PATIENTS? A 12-MONTH PROSPECTIVE MULTICENTER COHORT STUDY	Y. van Zaanen, A. J. Kievit ¹ , R. C. van Geenen ² , T. M. Pahlplatz ¹ , M. J. Hoozemans ³ , L. Blankevoort ¹ , M. U. Schafröth ¹ , D. Haverkamp ⁴ , T. M. Vervest ⁵ , D. H. Das ⁶ , V. A. Scholtes ⁷ , A. J. van der Beek ⁸ , P. F. Kuijer ¹ , ¹ Amsterdam UMC, Univ. of Amsterdam, Amsterdam, Netherlands, ² Amphia Hosp., Breda, Netherlands, ³ Vrije Univ.it Amsterdam, Amsterdam, Netherlands, ⁴ Xpert Orthopaedics, Amsterdam, Netherlands, ⁵ Tergooi Hosp., Hilversum, Netherlands, ⁶ St. Anna Hosp., Geldrop, Netherlands, ⁷ LOLVG+, Amsterdam, Netherlands, ⁸ Amsterdam UMC, Vrije Univ.it Amsterdam, Amsterdam, Netherlands
431	ATLAS: THE DEVELOPMENT OF ONLINE EDUCATION AND TRAINING IN BEST EVIDENCE OSTEOARTHRITIS CARE FOR HEALTHCARE PROFESSIONALS	S. Kobayashi, D. J. Hunter ¹ , K. Bennell ² , A. Briggs ³ , A. Burgess ¹ , R. S. Hinman ² , J. P. Eyles ¹ , ¹ Univ. of Sydney, Sydney, Australia, ² Univ. of Melbourne, Melbourne, Australia, ³ Curtin Univ., Perth, Australia
432	TO OBSERVE THE CLINICAL EFFICACY OF TAIBAI TONGLUO GEL CREAM COMBINED WITH SODIUM HYALURONATE INJECTION IN THE TREATMENT OF KNEE OSTEOARTHRITIS	y. li, Shaanxi Univ. of Traditional Chinese Med., Xianyang, China
433	THERAPEUTIC EFFECT OF HEAT-SENSITIVE MOXIBUSTION COMBINED WITH ACUPUNCTURE ON KNEE OSTEOARTHRITIS	Y. Cao, Shaanxi Univ. of traditional Chinese medicine, Xianyang, China
434	CLINICAL STUDY OF WARM ACUPUNCTURE COMBINED WITH CELECOXIB CAPSULES IN THE TREATMENT OF KNEE OSTEOARTHRITIS	z. yang, W. Li ² , ¹ Shaanxi Univ. of Traditional Chinese Med., Xianyang, China, ² Ningqiang County Tianjin Hosp., Hanzhong, China
435	NO ASSOCIATION BETWEEN MRI-DETECTED KNEE STRUCTURAL CHANGES AND LOCOMOTIVE SYNDROME IN ELDERLIES WITH PRIMARY-STAGE KNEE OSTEOARTHRITIS -THE BUNKYO HEALTH STUDY (BHS)	S. WAKANA, H. KANEKO, L. LIU, Y. MACHIYAMA, T. YAMAMURA, A. Adili, M. MOMOEDA, J. TOMURA, Y. NEGISHI, K. YOSHIDA, K. KOBAYASHI, M. KUBOTA, Y. TAMURA, R. KAWAMORI, M. ISHIJIMA, Juntendo Univ. Graduate Sch. of Med., Tokyo, Japan
436	EFFECTS OF ICARIIN ON SERUM B-ALP, TRACP, BGP AND BONE MICROSTRUCTURE IN OSTEOPOROTIC MICE AFTER CASTRATION.	B. Dong, B. Dong, Shaanxi Univ. of traditional Chinese medicine, Xianyang, China

- 437 TRAINING MUSCULOSKELETAL PHYSIOTHERAPISTS IN PATIENT-CENTRED CARE INFORMED BY ACCEPTANCE AND COMMITMENT THERAPY (MUPACT): A PILOT STUDY. M. K. March², B. Judd², A. R. Harmer², J. P. Eyles³, S. M. Dennis^{2,4,5}, ¹Western Sydney Local Hlth.District, Sydney, Australia, ²Univ. of Sydney, Sydney, Australia, ³Kolling Insitute, Univ. of Sydney, Sydney, Australia, ⁴South Western Sydney Local Hlth.District, Sydney, Australia, ⁵Ingham Inst. for Applied Med. Res., Sydney, Australia
- 438 TELEHEALTH IS NON-INFERIOR TO FACE-TO-FACE CARE TO REDUCE INTERMUSCULAR ADIPOSE TISSUE DEPOTS FOR ADULTS WITH KNEE OSTEOARTHRITIS: A RANDOMIZED CONTROLLED NON-INFERIORITY TRIAL J. Aily, A. da Silva Conte¹, R. Ferrari¹, L. Approbato Selistre¹, M. de Noronha², S. Mattiello¹, ¹Federal Univ. of São Carlos, São Carlos, Brazil, ²La Trobe Univ., Bendigo, Australia
- 439 ASSOCIATION OF BASELINE PHYSICAL ACTIVITY PARTICIPATION WITH PATIENT CHARACTERISTICS AND VARIABLES FOLLOWING EDUCATION AND EXERCISE THERAPY IN PEOPLE WITH KNEE OSTEOARTHRITIS: A GLA:D® AUSTRALIA COHORT STUDY. E. C. Bell, M. F. Pazzinato¹, J. L. Kemp¹, J. A. Wallis¹, S. T. Skou^{2,3}, P. O'Halloran¹, K. M. Crossley¹, C. J. Barton¹, ¹La Trobe Univ., Bundoora, Australia, ²Univ. of Southern Denmark, Odense, Denmark, ³Næstved-Slagelse-Ringsted Hosp., Slagelse, Denmark
- 440 FEASIBILITY OF A MULTICENTER RANDOMIZED CONTROLLED TRIAL OF A COMPLEX INTERVENTION OF COMBINED EXERCISE THERAPY, EDUCATION, COGNITIVE BEHAVIORAL THERAPY AND TOTAL KNEE ARTHROPLASTY IN PATIENTS WITH KNEE OSTEOARTHRITIS T. Rognsvaag², I. Bergvad^{3,4}, O. Furnes^{5,2}, K. Indrekvam^{1,2}, A. Lerdal^{3,4}, M. Lindberg^{3,4}, S. Skou^{6,7}, J. Stubberud⁴, M. Badawy¹, ¹Haukeland Univ. Hosp., Hagavik, Norway, ²Univ. of Bergen, Bergen, Norway, ³Lovisenberg Diaconal Hosp., Oslo, Norway, ⁴Univ. of Oslo, Oslo, Norway, ⁵Haukeland Univ. Hosp., Bergen, Norway, ⁶Næstvedt-Slagelse-Ringsted Hosp., Slagelse, Denmark, ⁷Univ. og Southern Denmark, Odense, Denmark
- 441 PATIENT AND PHYSIOTHERAPIST PERCEPTIONS OF COGNITIVE MUSCULAR THERAPY FOR KNEE OSTEOARTHRITIS S. J. Preece, N. Brookes¹, N. E. Walsh², D. Ghio³, ¹Univ. of Salford, Manchester, United Kingdom, ²Univ. of the West of England, Bristol, United Kingdom, ³Univ. of Manchester, Manchester, United Kingdom
- 441 THE SWEDISH OSTEOARTHRITIS REGISTRY. TRENDS IN SWEDISH OSTEOARTHRITIS HEALTH CARE BETWEEN 2008- 2021 K. Wetterling, M. Mohaddes¹, T. S. Jonsson², ¹Inst. of Clinical Sci., Gothenburg, Sweden, ²Div. of Sport Sci., Lund University, Sweden
- 443 A MULTIFACETED PICTURE OF PATIENT PERSPECTIVES OF HEALTH CARE AND SELF-MANAGEMENT IN HIP AND KNEE OSTEOARTHRITIS K. Gustafsson², K. Areskoug Josefsson^{3,4,5}, M. Eriksson⁶, O. Rolfson^{7,8}, J. Kvist^{1,9}, ¹Linköping Univ., Linköping, Sweden, ²Ryhov County Hosp., Jönköping, Sweden, ³Oslo Metropolitan Univ., Oslo, Norway, ⁴Univ. West, Trollhättan, Sweden, ⁵Jönköping Univ., Jönköping, Sweden, ⁶Region Jönköping County, Jönköping, Sweden, ⁷Univ. of Gothenburg, Sahlgrenska Academy, Gothenburg, Sweden, ⁸Sahlgrenska Univ. Hosp., Gothenburg, Sweden, ⁹Karolinska Inst., Stockholm, Sweden
- 444 EXAMINING RACIAL DISPARITIES IN PHYSICAL THERAPY DELIVERY AMONG ADULTS AFTER ACL INJURY ACCESSING A NATIONWIDE PRIVATE PRACTICE IN THE UNITED STATES C. Y. Lane, A. D. Lutz², L. M. Thoma¹, ¹Univ. of North Carolina at Chapel Hill, Chapel Hill, NC, ²ATI Physical Therapy, Greenville, SC
- 445 PARTICIPATION IN A DIGITAL SELF-MANAGEMENT INTERVENTION FOR OSTEOARTHRITIS AND SOCIOECONOMIC INEQUALITIES IN PATIENT-REPORTED OUTCOMES A. Kiadaliri^{1,2}, P. Sirard², L. E. Dahlberg^{1,2}, S. L. Lohmander², ¹Lund Univ., Lund, Sweden, ²Arthro Therapeutics, Malmö, Sweden

- 446 WHAT FACTORS REQUIRE CONSIDERATION WHEN INDIVIDUALISING EXERCISE INTERVENTIONS FOR PEOPLE WITH OSTEOARTHRITIS? CONSENSUS OF EXPERTS USING A DELPHI METHODOLOGY K. Yaseen², W. Zhang¹, M. Doherty¹, A. Abhishek¹, G. Jamtvedt³, M. Martinez⁴, N. Walsh⁵, E. Roddy⁶, M. Callaghan⁷, S. Goh⁸, T. Smith⁹, M. Holden¹⁰, D. Sala¹¹, M. Hall¹², K. Allen¹³, E. Lee¹⁴, C. Mallen¹⁵, P. Conaghan¹⁶, M. Hall¹, ¹Univ. of Nottingham, Nottingham, United Kingdom, ²King Abdulaziz Univ., Jeddah, Saudi Arabia, ³Norwegian Knowledge Ctr., Oslo, Norway, ⁴Pés Sem Dor, São Paulo, Brazil, ⁵Univ. of the West of England, Bristol, United Kingdom, ⁶Keele Univ., Stoke-on-Trent, United Kingdom, ⁷Manchester Univ., Manchester, United Kingdom, ⁸Univ. of Malaya, Kuala Lumpur, Malaysia, ⁹Univ. of Oxford, Oxford, United Kingdom, ¹⁰Keel Univ., Stoke-on-Trent, United Kingdom, ¹¹Palmerston Physiotherapy Clinic, Palmerston, Australia, ¹²Univ. of Melbourne, Melbourne, Australia, ¹³Duke Univ., Durham, NC, ¹⁴Natl. Hlth.Service, NHS, Nottingham, United Kingdom, ¹⁵Univ. of Keele, Stoke-on-Trent, United Kingdom, ¹⁶Univ. of Leeds, Leeds, United Kingdom
- 447 EFFECT OF APPA (COMBINATION OF APOCYNIN AND PAEONOL) COMPOUND ON CELLULAR SENESENCE USING HUMAN ARTICULAR CHONDROCYTES M. FERNANDEZ-MORENO, T. Hermida-Gomez², N. Larkins³, A. Reynolds³, F. Blanco-Garcia¹, ¹INIBIC, LA CORUÑA, Spain, ²CIBER-BBN, Madrid, Spain, ³AKL Res. & Dev., Stevenage United Kingdom, United Kingdom
- 448 RELATION OF THERAPEUTIC ALLIANCE AND ADHERENCE WITH CHANGES IN PAIN AND FUNCTION AFTER A PHYSICAL THERAPIST-DELIVERED EXERCISE INTERVENTION IN PEOPLE WITH KNEE OSTEOARTHRITIS M. Holmes, T. Neogi², L. Marinko¹, M. Gheller², S. Jafarzadeh², L. Adamowicz³, P. Georgiev³, L. Viktrup⁴, C. Demanuele³, P. Wacnik³, D. Kumar¹, ¹Boston Univ., Boston, MA, ²Boston Univ. Sch. of Med., Boston, MA, ³Pfizer Inc., Cambridge, MA, ⁴Eli Lilly and Company, Indianapolis, IN
- 449 STIMULATION OF THE CHONDROREPARATIVE ACTIVITIES OF HUMAN OSTEOARTHRITIC ARTICULAR CHONDROCYTES UPON OVEREXPRESSION OF SOX9 AND TGF- β VIA RAAV GENE VECTOR DELIVERY IN AN ALGINATE-BASED HYDROGEL W. Liu, J. K. Venkatesan, G. Schmitt, H. Madry, M. Cucchiari, Saarland Univ., Homburg, Germany
- 450 MILD TREADMILL EXERCISE INHIBITS CARTILAGE DEGENERATION VIA MACROPHAGES IN AN OA OSTEOARTHRITIS MOUSE MODEL Y. Oka, K. Murata², K. Onone¹, Y. Minegishi¹, T. Kano¹, N. Kanemura², ¹Graduate Sch. of Saitama Prefectural Univ., Koshigaya, Japan, ²Saitama Prefectural Univ., Koshigaya, Japan
- 451 JOINT DISTRACTION USING AN INTENDED DEVICE FOR KNEE OSTEOARTHRITIS: A PROSPECTIVE TWO-YEAR FOLLOW-UP M. P. Jansen, T. Struik¹, R. W. Brouwer², R. J. Custers¹, R. C. Van Geenen¹, C. H. Heusdens³, P. J. Emans⁴, F. P. Lafeber¹, S. C. Mastbergen¹, ¹Univ. Med. Ctr. Utrecht, Utrecht, Netherlands, ²Martini Ziekenhuis, Groningen, Netherlands, ³Antwerp Univ. Hosp., Antwerp, Belgium, ⁴Maastricht Univ. Med. Ctr., Maastricht, Netherlands
- 452 DIVERSITY WITHIN MOVEMENT-BASED MIND-BODY INTERVENTIONS FOR LOWER EXTREMITY OSTEOARTHRITIS: A SYSTEMATIC REVIEW OF UNITED STATES RANDOMIZED CLINICAL TRIALS E. A. Fallon, C. A. Spears¹, C. Der Ananian², ¹Georgia State Univ., Atlanta, GA, ²Arizona State Univ., Phoenix, AZ
- 453 HETEROGENEITY OF MRI-DETECTED CARTILAGE DAMAGE IN KELLGREN-LAWRENCE 2 & 3 KNEES AND IMPLICATIONS FOR CLINICAL TRIALS: THE OSTEOARTHRITIS INITIATIVE (OAI) M. Jarraya, F. W. Roemer^{2,3}, E. L. Ashbeck⁴, J. Lynch⁵, K. C. Kwok⁴, A. Guermazi^{6,3}, ¹Massachusetts Gen. Hosp., Boston, MA, ²Univ. of Erlangen-Nuremberg, Erlangen, Germany, ³Boston Univ. Sch. of Med., Boston, MA, ⁴Univ. of Arizona Coll. of Med., Tucson, AZ, ⁵UCSF, San Francisco, CA, ⁶VA Boston Hlth.care, Boston, MA
- 454 CHALLENGES TO IMPLEMENTING PHYSICAL ACTIVITY IN PATIENTS WITH KNEE OSTEOARTHRITIS DURING THE COVID-19 PANDEMIC: A QUALITATIVE STUDY P. V. Santos, A. A. Alves, J. B. Aily, L. A. Selistre, Federal Univ. of São Carlos, São Carlos, Brazil

- 455 COMPARATIVE EFFECTIVENESS OF EXERCISE MODALITIES IN PATIENTS WITH KNEE AND HIP OSTEOARTHRITIS: A NETWORK META-ANALYSIS P. Bobos¹, T. Pereira², P. Sadaat³, N. Bodmer³, S. Iskander¹, H. Kiyomoto⁴, T. Montezuma⁵, M. Almeida⁶, L. King³, G. Hawker³, P. Juni⁷, B. da Costa³, ¹Western Univ., London, ON, Canada, ²Univ. of Leicester, Leceister, United Kingdom, ³Univ. of Toronto, Toronto, ON, Canada, ⁴Univ. of Sao Paulo, Sao Paulo, Brazil, ⁵Oswaldo Cruz German Hosp., Sao Paulo, Brazil, ⁶Univ. e Ibirapuera, Sao Paulo, Brazil, ⁷Univ. of Oxford, London, ON, Canada
- 456 DENERVATION AS A TREATMENT STRATEGY FOR PAIN IN HAND OSTEOARTHRITIS: A SYSTEMATIC LITERATURE REVIEW C. van der Meulen, L. A. van de Stadt¹, A. Claassen², F. P. Kroon³, M. J. Ritt⁴, F. R. Rosendaal¹, S. E. Terpstra¹, A. J. Vochteloo⁵, M. Kloppenburg¹, ¹LUMC, Leiden, Netherlands, ²Dutch Society for Rheumatology, Utrecht, Netherlands, ³Zuyderland Med. Ctr., Heerlen, Netherlands, ⁴Amsterdam Univ. Med. Ctr., Amsterdam, Netherlands, ⁵CON orthopedic clinic, Leiden, Netherlands
- 457 IN VITRO MODEL TO STUDY TAZAROTENE IN THE TREATMENT OF HAND OSTEOARTHRITIS H. Hamzehpour, B. Snorraddóttir¹, H. Jónsson¹, Ó. Sigurjónsson², ¹Unicersity of Iceland, Reykjavík, Iceland, ²Unicersity of Reykjavík, Reykjavík, Iceland
- 458 PRESCRIPTIONS FOR ANALGESICS FOR THE TREATMENT OF OSTEOARTHRITIS DURING THE COVID-19 PANDEMIC: A RETROSPECTIVE ANALYSIS D. Pina, Jr., M. Kaur², D. Ochi³, D. Black³, J. Robert Fine³, B. L. Wise^{3,3}, ¹Univ. of California, Davis Sch. of Med., Sacramento, CA, ²Univ. of California, San Diego, San Diego, CA, ³Univ. of California, Davis, Sacramento, CA
- 459 SCORE ASSESSMENT OF EFECTIVENESS OF KNEE OSTEOARTHRITIS TREATMENT WITH UNDENATURED COLLAGEN TYPE II D. Rekalov, I. Golovach², I. Daniuk³, ¹LLC Modern Clinic, Zaporizhzhia, Ukraine, ²Feofaniya Clinical Hosp., Kiyv, Ukraine, ³ZSMU, Zaporizhzhia, Ukraine
- 460 ASSOCIATION OF NON-STEROIDAL ANTI-INFLAMMATORY DRUGS ON SYNOVITIS AND THE PROGRESSION OF OSTEOARTHRITIS: DATA FROM THE OSTEOARTHRITIS INITIATIVE J. Luitjens, F. Gassert, G. Joseph, J. Lynch, M. Nevitt, N. Lane, C. McCulloch, T. Link, UCSF, San Fransisco, CA
- 461 EFFECTS OF ZHENWU SOUP COMBINED WITH SODIUM HYALURONATE INJECTION ON INFLAMMATORY FACTORS AND CHONDROCYTE METABOLISM IN RABBITS WITH KNEE OSTEOARTHRITIS z. yang, W. Li², ¹Shaanxi Univ. of Traditional Chinese Med., Xianyang, China, ²Ningqiang County Tianjin Hosp., Hanzhong, China
- 462 DOXYCYCLINE IS SAFE OVER AN EXTENDED EXPOSURE: A SYSTEMATIC REVIEW OF THE LONG-TERM SAFETY PROFILES OF MACROLIDES AND TETRACYCLINES P. Waitayangkoon, J. Driban², L. Zeng², T. McAlindon², ¹MetroWest Med. Ctr., Tufts Univ. Sch. of Med., Framingham, MA, ²Tufts Med. Ctr., Boston, MA
- 463 RISK OF ISCHAEMIC STROKE AMONG NEW USERS OF GLUCOSAMINE AND CHONDROITIN SULPHATE: A NESTED CASE-CONTROL STUDY. J. Vergés, N. Martínez¹, F. de Abajo², ¹OAFI, Barcelona, Spain, ²Alcalá Univ. (IRYCIS), Alcalá de Henares, Spain
- 464 IDENTIFYING CLINICALLY RELEVANT SUBGROUPS OF PATIENTS WITH KNEE PAIN FLARE-UPS FOR IBUPROFEN TREATMENT R. U. Sharma, J. Runhaar¹, P. K. Bos¹, D. M. Dorleijn², M. Vis¹, P. J. Bindels¹, S. M. Bierma-Zeinstra¹, ¹Erasmus MC Univ. Med. Ctr. Rotterdam, Rotterdam, Netherlands, ²Leiden Univ. Med. Ctr., Leiden, Netherlands
- 465 STRUCTURAL SEVERITY IN KNEE OSTEOARTHRITIS IMPACTS TREATMENT RESPONSE: A POST HOC POOLED ANALYSIS OF LORECIVIVINT CLINICAL TRIALS Y. Yazici², C. Swearingen¹, H. Ghandehari¹, S. Kennedy¹, I. Simsek¹, J. Tambiah¹, T. McAlindon³, ¹Biosplice Therapeutics, San Diego, CA, ²NYU Grossman Sch. of Med., New York, NY, ³Tufts Univ., Boston, MA
- 466 A DOUBLE-BLIND, RANDOMIZED, PARALLEL GROUP COMPARISON OF THE EFFECTS OF TRIAMCINOLONE ACETONIDE EXTENDED-RELEASE AND TRIAMCINOLONE ACETONIDE IMMEDIATE-RELEASE ON CONTINUOUS GLUCOSE MONITORING IN PATIENTS WITH OSTEOARTHRITIS OF THE KNEE AND TYPE 2 DIABETES MELLITUS: A POST-HOC ANALYSIS A. Spitzer¹, H. Rodbard², S. Iqbal³, M. Nakazawa³, M. DiGiorgi³, R. Winston³, ¹Cedars-Sinai Med. Ctr., Los Angeles, CA, ²Endocrine and Metabolic Consultants, Rockville, MD, ³Pacira BioSci.s, Inc., Parsippany, NJ

- 467 EFFECTS OF CANNABIS EXTRACTS ON PAIN AND PTOA PROGRESSION IN MICE, INVOLVEMENT OF ENTOURAGE AND SEX-DEPENDENT EFFECTS V. Karuppagounder, A. Thompson, C. Howell, K. Verma, W. Pinamont, N. Yoshioka, W. Raup-Konsavage, K. E. Vrana, R. A. Elbarbary, F. Kamal, Pennsylvania State Univ., Hershey, PA
- 468 OPIOID USAGE AND ASSOCIATED HEALTHCARE COSTS IN PATIENTS WITH POST-TRAUMATIC KNEE OSTEOARTHRITIS C. E. Conley, A. V. Stone1, D. C. Landy1, K. L. Thompson1, G. S. Hawk1, C. A. Jacobs2, 1Univ. of Kentucky, Lexington, KY, 2Brigham and Women's Hosp., Harvard Univ., Boston, MA
- 469 ACOUSTIC CLASSIFICATION OF PRE-RADIOGRAPHIC OSTEOARTHRITIS OF THE KNEE D. Ewart2, C. Nichols3, O. Inan3, 1Minneapolis VA Hlth.care System, Minneapolis, MN, 2Univ. of Minnesota, Minneapolis, MN, 3Georgia Inst. of Technology, Atlanta, GA
- 470 EFFICACY ASSESSMENT OF THE NOVEL COMBINED ANTI-OA TREATMENT SYN321 IN AN ADVANCED MECHANICALLY ACTIVE OSTEOARTHRITIS-ON-CHIP MODEL C. Palma, S. Piazza2, A. Bermejo Gómez3, M. Rasponi1, P. Occhetta1,2, 1Politecnico di Milano, Milan, Italy, 2BiomimX S.r.l, Milan, Italy, 3Synartro AB, Solna, Sweden
- 471 A COMPARTMENTALIZED JOINT-ON-CHIP MODEL AS TOOL TO INVESTIGATE CARTILAGE-SYNOVIUM INTERACTIONS IN EARLY STAGES OF OSTEOARTHRITIS C. Palma, S. Salehi2, M. Moretti2, P. Occhetta1, S. Lopa2, M. Rasponi1, 1Politecnico di Milano, Milan, Italy, 2IRCCS Istituto Ortopedico Galeazzi, Milan, Italy
- 472 A SINGLE-CELL RNA SEQUENCING ANALYSIS OF ALK1 AND RELATED BMP PATHWAY PROTEINS IN OSTEOARTHRITIS PROGRESSION E. D. Johnston, W. Wang, K. Lyons, UCLA, Los Angeles, CA
- 473 ULTRASONOGRAPHY MAY IMPROVE OSTEOARTHRITIS PAIN PREDICTION: AN ARTIFICIAL INTELLIGENCE APPROACH B. Mehta2, Y. Choi3, J. A. Gibbons4, S. M. Goodman1,2, D. Orange5,1, M. Otero1, S. Ibrahim6, M. Fontana1,2, P. Sculco1, M. Figgie1, J. Rodriguez1, S. Lee7, D. Mintz1, F. Wang2, O. Nwawka1, 1Hosp. for Special Surgery, New York, NY, 2Weill Cornell Med. Coll., New York, NY, 3Natl. Cancer Ctr., Goyang, Korea, Republic of, 4Columbia Univ., New York, NY, 5Rockefeller Univ., New York, NY, 6Northwell Hlth., New Hyde Park, NY, 7Allegheny Hlth.Network, New York, NY
- 474 AUTOMATIC SEGMENTATION OF EFFUSION FROM KNEE MAGNETIC RESONANCE IMAGING M. Chowdhury1, M. Zhang2, X. Sun3, J. Driban4, T. McAlindon4, J. Shan, 1Pace Univ., NYC, NY, 2Boston Univ., Boston, MA, 3Shandong Univ., Shandong, China, 4Tufts Med. Ctr., Boston, MA
- 475 COLCHICINE TWICE DAILY FOR HAND OSTEOARTHRITIS: RESULTS FROM THE DOUBLE-BLIND, RANDOMISED, PLACEBO-CONTROLLED COLOR TRIAL A. Døssing, M. Henriksen1, K. Ellegaard1, S. M. Nielsen2,3, L. K. Stamp4, F. C. Müller5, M. Kloppenburg6, I. K. Haugen7, G. McCarthy8, P. G. Conaghan9, L. U. Dahl1, L. Terslev10, R. D. Altman11, F. Becce12, E. Ginnerup-Nielsen1, L. Jensen1, M. Boesen13, R. Christensen1,14, U. Dal1, H. Bliddal1, 1The Parker Inst., Copenhagen, Denmark, 2Section for Biostatistics and Evidence-Based Res., the Parker Inst., Copenhagen, Denmark, 3Res. Unit of Rheumatology, Dept. of Clinical Res., Univ. of Southern Denmark, Odense Univ. Hosp., Odense, Denmark, 4Dept. of Med., Univ. of Otago, Christchurch, Christchurch, New Zealand, 5Dept. of Radiology, Herlev and Gentofte Hosp., Univ. of Copenhagen, Copenhagen, Denmark, 6Dept.s of Rheumatology and Clinical Epidemiology, Leiden Univ. Med. Ctr., Leiden, Netherlands, 7Ctr. for Treatment of Rheumatic and Musculoskeletal Diseases (REMEDY), Diakonhjemmet Hosp., Oslo, Norway, 8Clinical Professor of Med., Sch. of Med. and Med. Sci., Univ. Coll. Dublin, Dublin, Ireland, 9Leeds Inst. of Rheumatic and Musculoskeletal Med., Univ. of Leeds and Natl. Inst. for Hlth.and Care Res. Leeds BioMed. Res. Ctr., Leeds, United Kingdom, 10Ctr. for Rheumatology and Spine Diseases, RigsHosp.et, Univ. of Copenhagen, Copenhagen, Denmark, 11Div. of Rheumatology and Immunology, The David Geffen Sch. of Med.s at the Univ. of California at Los Angeles (UCLA), Los Angeles, CA, 12Dept. of Diagnostic and Interventional Radiology, Lausanne Univ. Hosp. and Univ. of Lausanne, Lausanne, Switzerland, 13Dept. of Radiology, Bispebjerg and Frederiksberg Hosp., Univ. of Copenhagen, Copenhagen, Denmark, 14Res. Unit of Rheumatology, Dept. of Clinical Res., Univ. of Southern Denmark, Odense Univ. Hosp., Odense, Denmark

- 476 PLASMA CRTAC-1 MEASURED BY ELISA, PREDICTS THE PROGRESSION TO TOTAL JOINT REPLACEMENT, INDEPENDENTLY OF URINARY CTX-II, IN POSTMENOPAUSAL WOMEN P. Garnero, E. Gineyts, J-C. Rousseau, E. Sornay-Rendu, R. D. Chapurlat, INSERM research unit 1033-Lyos, Lyon, France
- 477 A MACHINE LEARNING APPROACH TO IDENTIFY PATTERNS OF VARIATION AMONG COLLAGEN BIOMARKERS AND CLINICAL FEATURES IN A COMMUNITY-BASED COHORT L. Arbeeve, E. Borgert¹, T. Keefe¹, A-C. Bay-Jensen², R. Loeser¹, Y. Golightly^{3,1}, J. Marron¹, A. Nelson¹, 1UNC at Chapel Hill, Chapel Hill, NC, 2Biomarkers and Res., Nordic BioSci. A/S, Herlev, Denmark, 3UNMC Coll. of Allied Hlth. Professions, Omaha, NE
- 478 THE OPPOSING EFFECT ON GASTROCNEMIUS AND SOLEUS INDUCED BY ANTERIOR CRUCIATE LIGAMENT TRANSECTION: GAIT ANALYSIS AND MUSCLE ASSESSMENT M. Nagai-Tanima, A. Ishikawa, H. Kawai, K. Ishida, H. Kuroki, T. Takakuwa, T. Aoyama, Kyoto Univ., Kyoto, Japan
- 479 SEX-SPECIFIC KNEE BIOMECHANICS IN PERSONS WITH AND WITHOUT KNEE OSTEOARTHRITIS: A SYSTEMATIC REVIEW AND META-ANALYSIS M. Yamagata², T. Kimura³, A. H. Chang⁴, H. Iijima⁵, 1Kansai Med. Univ., Osaka, Japan, 2Kyoto Univ., Kyoto, Japan, 3Kobe Univ., Kobe, Japan, 4Northwestern Univ. Feinberg Sch. of Med., Chicago, IL, 5Nagoya Univ., Aichi, Japan
- 480 STATIC FUNCTIONAL HIP-KNEE-ANKLE ALIGNMENT FROM A KNEE KINESIOGRAPHY EXAM IS EQUIVALENT TO ALIGNMENT MEASURE FROM LONG-LEG RADIOGRAPHS P. Landry¹, N. Hagemester², A. Cagnin¹, P-A. Vendittoli³, 1Emovi, Montreal, QC, Canada, 2École de technologie supérieure, Montreal, QC, Canada, 3Hôpital Maisonneuve-Rosemont, Montreal, QC, Canada
- 481 DYNAMIC KNEE JOINT STIFFNESS DURING RUNNING IS ASSOCIATED WITH CARTILAGE T1RHO RELAXATION TIMES 12- MONTHS POST ANTERIOR CRUCIATE LIGAMENT RECONSTRUCTION M. K. Owen, M. Jacobs¹, N. Heebner¹, C. Latterman², A. Stone¹, C. Conley¹, C. Jacobs², M. Samaan¹, B. Noehren¹, 1Univ. of Kentucky, Lexington, KY, 2Harvard Univ., Boston, MA
- 482 OSTEOARTHRITIS YOUNG ONSET AND STICKLER SYNDROME: A COMPLEX DISEASE, BETWEEN GENETIC AND CLINICAL MANIFESTATIONS K. A. IBARRA STONE, V. G. PACHECO PILCO, I. D. GUTIERREZ FARFAN, R. A. LOPEZ GAMBOA, M. C. FUENTES CATAÑO, A. HIDALGO BRAVO, L. J. JARA QUEZADA, R. ESPINOSA MORALES, INSTITUTO NACIONAL DE REHABILITACION, ciudad de mexico, Mexico
- 483 3 YEAR RESULTS FROM A PROSPECTIVE STUDY OF POLYACRYLAMIDE HYDROGEL FOR KNEE OSTEOARTHRITIS M. Henriksen, J. Beier², A. Hartkopp³, P. G. Conaghan⁴, H. Bliddal¹, 1The Parker Inst., Bispebjerg Frederiksberg Hosp., Univ. of Copenhagen, Copenhagen, Denmark, 2Rheumatology in Odense, Odense, Denmark, 3A2 Rheumatology and Sports Med., Holte, Denmark, 4Leeds Inst. of Rheumatic and Musculoskeletal Med., Univ. of Leeds & NIHR Leeds BioMed. Res. Ctr., Leeds, United Kingdom
- 484 PHYSICAL FUNCTION STATUS IN HIP AND KNEE OSTEOARTHRITIS: PAIN, PSYCHOLOGICAL FEATURES AND FUNCTIONAL CAPACITY PLAY A MAJOR ROLE S. Espinosa-Salas, L. Bagherzadeh, T. J. Schnitzer, J. Barroso, Northwestern Univ. Feinberg Sch. of Med., Chicago, IL
- 485 GLA:D® TO BE WALKING BETTER: CHANGE IN SELF-REPORTED DIFFICULTY WALKING AFTER EXERCISE THERAPY AND EDUCATION IN PERSONS WITH KNEE OSTEOARTHRITIS L. K. King, J. Young², D. T. Grønne³, A. Bricca^{3,4}, E. M. Roos⁵, S. T. Skou^{3,4}, G. A. Hawker¹, 1Dept. of Med., Univ. of Toronto, Toronto, ON, Canada, 2Schroeder Arthritis Inst., Krembil Res. Inst., Univ. Hlth. Network, Toronto, ON, Canada, 3Ctr. for Muscle and Joint Hlth., Dept. of Sports Sci. and Clinical Biomechanics, Univ. of Southern Denmark, Odense, Denmark, 4The Res. Unit PROgrez, Dept. of Physiotherapy and Occupational Therapy, Næstved-Slagelse-Ringsted Hosp., Slagelse, Denmark, 5Ctr. for Muscle and Joint Hlth., Dept. of Sports Sci. and Clinical Biomechanics, Odense, Denmark
- 486 A QUALITATIVE STUDY EXPLORING PATIENT PERCEPTIONS OF PERSONALIZED PREDICTION AND MONITORING IN REHABILITATION AFTER TOTAL KNEE ARTHROPLASTY L. Churchill, J. Graber^{1,2}, M. Mealer¹, M. J. Bade^{1,2}, J. E. Stevens-Lapsley^{1,2}, 1Univ. of Colorado, Anschutz Med. Campus, Aurora, CO, 2VA Eastern Colorado Hlth. care System, Aurora, CO
- 487 PREDICTION OF POST-SURGICAL DISABILITY IN KNEE OSTEOARTHRITIS PATIENTS L. Bagherzadeh, S. Espinosa-Salas, T. J. Schnitzer, J. De Brito Barroso Monteiro, Northwestern Univ., Feinberg Sch. of Med., Chicago, IL

- 488 RANDOMIZED CONTROL TRIALS ON PLATELET-RICH PLASMA INTERVENTION FOR KNEE OSTEOARTHRITIS POORLY ADHERE TO THE MINIMUM INFORMATION FOR STUDIES EVALUATING BIOLOGICS (MIBO) GUIDELINES: A SYSTEMATIC REVIEW A. V. Stone¹, V. Abed¹, M. Owens¹, N. Brunty², M. Skinner¹, C. Jacobs³, ¹Univ. of Kentucky, Lexington, KY, ²Univ. of Kentucky, LEXINGTON, KY, ³Mass Gen. Brigham Sports, Brigham and Women's Hosp., Boston, MA
- 489 ASSESSMENT OF HIP JOINT STRUCTURAL AND CLINICAL OUTCOMES IN PEOPLE WITH MARFAN SYNDROME L. Steele, A. Fain, S. Duncan, M. Sheppard, M. A. Samaan, Univ. of Kentucky, Lexington, KY
- 490 INTRA-ARTICULAR MM-II, A NOVEL SUSPENSION OF LARGE EMPTY MULTILAMELLAR LIPOSOMES, IN PAINFUL KNEE OSTEOARTHRITIS: A 26 WEEK PHASE 2B PLACEBO-CONTROLLED DOUBLE BLIND RANDOMIZED TRIAL T. J. Schnitzer, H. Roving², E. Lau³, S. L. Boll⁴, B. Brahmachari⁵, R. C. Chou⁶, T. Joshi⁵, R. Wechsler⁷, S. L. Yao⁵, S. Weiner⁵, A. R. Bihlet⁸, P. C. Conaghan⁹, ¹Northwestern Univ., Chicago, IL, ²Sanos Clinic, Gandrup, Denmark, ³Hong Kong Ctr. for Clinical Res., Hong Kong, Hong Kong, ⁴Sanos Clinic, Vejle, Denmark, ⁵Sun Pharmaceutical Industries, Inc, Princeton, NJ, ⁶Univ. at Buffalo, Buffalo, NY, ⁷Moebius Med., Tel Aviv, Israel, ⁸NBCD, Herlev, Denmark, ⁹Univ. of Leeds, Leeds, United Kingdom
- 491 PLACE NOT RACE: COMMUNITY-LEVEL SOCIAL DETERMINANTS OF HEALTH MAY BE MORE IMPORTANT THAN PATIENT RACE IN TOTAL HIP ARTHROPLASTY OUTCOMES B. Mehta², Y. Wu³, D. Pearce-Fisher¹, K. Ho³, S. M. Goodman^{1,2}, M. Parks¹, F. Wang³, M. Fontana^{1,3}, S. Ibrahim⁴, P. Cram⁵, R. Caruana⁶, ¹Hosp. for Special Surgery, New York, NY, ²Weill Cornell Med. Coll., New York, NY, ³Weill Cornell Med., New York, NY, ⁴Northwell Hlth., New Hyde Park, NY, ⁵Univ. of Texas Med. Branch, Galveston, TX, ⁶Microsoft, Redmond, WA
- 492 PRESENCE OF EARLY RADIOGRAPHIC FEATURES OF OSTEOARTHRITIS DIFFERS BETWEEN SUBGROUPS 5 YEARS AFTER ANTERIOR CRUCIATE LIGAMENT INJURY E. K. Arhos, R. T. Pohlig², S. Di Stasi¹, M. Risberg^{3,4}, L. Snyder-Mackler², K. G. Silbernagel², ¹Ohio State Univ., Columbus, OH, ²Univ. of Delaware, Newark, DE, ³Norwegian Sch. of Sport Sci., Oslo, Norway, ⁴Oslo Univ. Hosp., Oslo, Norway
- 493 ULTRASOUND MEASUREMENT OF DECREASED VASTUS MEDIALIS QUALITY AS A MARKER FOR INCREASED STRUCTURAL ABNORMALITIES IN EARLY KNEE OSTEOARTHRITIS: A CASE-CONTROL STUDY A. Hoki, E. D'Amico², F. Ambrosio^{3,4}, T. Iwasaki¹, Y. Matsuda^{1,5}, H. Iijima^{6,7}, ¹Matsuda orthopedic clinic, Saitama, Japan, ²Univ. of Pittsburgh, Pittsburgh, PA, ³Spaulding Rehabilitation Hosp. and Harvard Med. Sch., Boston, MA, ⁴Schoen Adams Res. Inst. at Spaulding, Boston, MA, ⁵Josai Univ., Saitama, Japan, ⁶Nagoya Univ., Nagoya, Japan, ⁷Nagoya Univ. Graduate Sch. of Med., Nagoya, Japan
- 494 KNEE ARTHROSCOPIC SURGERY IN MIDDLE-AGED PATIENTS WITH MENISCAL SYMPTOMS. A 10-YEAR FOLLOW-UP OF A PROSPECTIVE, RANDOMIZED STUDY J. Kvist, S. Sonesson¹, H. Gauffin², ¹Unit of Physiotherapy, Linköping, Sweden, ²Orthopaedics and Dept. of BioMed. and Clinical Sci., Linköping, Sweden
- 495 SURGERIES WITHIN TWO YEARS AFTER ACUTE ANTERIOR CRUCIATE LIGAMENT INJURY. RESULTS FROM THE NACOX-STUDY J. Kvist^{2,3}, A. Samuelsson Selin⁴, A. Fältström^{1,5}, H. Gauffin⁴, ¹Unit of Physiotherapy, Linköping, Sweden, ²Ctr. for Med. Image Sci. and Visualization (CMIV), Linköping, Sweden, ³Stockholm Sports Trauma Res. Ctr., Stockholm, Sweden, ⁴Orthopaedics and Dept. of BioMed. and Clinical Sci., Linköping, Sweden, ⁵Region Jönköping County, Rehabilitation Ctr., Ryhov County Hosp., Jönköping, Sweden
- 496 AUTOMATED QUANTITATIVE METHODS FACILITATING CLINICAL MANUFACTURING OF ENGINEERED OSTEOCHONDRAL TISSUES IN COMPLIANCE WITH CURRENT GOOD MANUFACTURING PRACTICE H. CHENG, B. CHAN, THE Univ. OF HONG KONG, HONG KONG, Hong Kong
- 497 INHIBITION OF A SIGNALING MODALITY WITHIN GP130 RECEPTOR ENHANCES TISSUE REGENERATION AND MITIGATES OSTEOARTHRITIS R. Shkhyan¹, C. Flynn², A. Sarkar¹, B. Van Handel¹, J. Tassej¹, H. Harn¹, C-M. Chuong¹, N. Liu¹, M. Hurtig², D. Evseenko, ¹Univ. of Southern California, Los Angeles, CA, ²Univ. of Guelph, Guelph, CA, Canada
- 498 GENICULAR ARTERY EMBOLIZATION VERSUS SHAM EMBOLIZATION FOR SYMPTOMATIC OSTEOARTHRITIS OF THE KNEE. T. A. van Zadelhoff, E. H. Oei, A. Moelker, R. A. van der Heijden, P. K. Bos, S. M. Bierma-Zeinstra, Erasmus Univ. Med. Ctr. Rotterdam, Rotterdam, Netherlands
- 499 SUPPRESSION OF TUMORIGENIC SIGNALING IN CHONDROSARCOMA BY MESENCHYMAL STEM CELL DERIVED CONDITIONED MEDIUM S. Ahandoust, X. Xiong, K. Li, H. Yokota, S. Na, Indiana Univ.-Purdue Univ. Indianapolis, Indianapolis, IN

500	NANOPARTICLE BASED DNMT3B GENE THERAPY ATTENUATES ARTHRITIS PROGRESSION IN A MURINE INJURY MODEL	A. Kucharski, A. Hollenberg1, H. Pan1, S. Wickline2, C. T. Pham1, A. McAlinden1, J. Shen1, R. O'Keefe1, 1Washington Univ. Sch. of Med., st. louis, MO, 2Univ. of South Florida, Tampa, FL
501	NOVEL SMALL MOLECULE MODULATOR OF THE GP130 RECEPTOR SHOWS DOSE-DEPENDENT THERAPEUTIC EFFICACY IN A CANINE MODEL OF OSTEOARTHRITIS	B. Van Handel, C. Flynn2, N. Liu3, J. Lu3, N. Lane4, M. Hurtig2, D. Evseenko3, 1Carthronix, Inc., Lancaster, CA, 2Univ. of Guelph, Guelph, ON, Canada, 3Univ. of Southern California, Los Angeles, CA, 4Univ. of California, Davis, Hillsborough, CA
502	GINGIVAL FIBROBLAST TREATMENT OF SECONDARY OSTEOARTHRITIS IN DOGS: EARLY AND ONE-YEAR FOLLOW-UP	F. Rannou, Sr., APHP, Paris Cité Univ., Paris, France
503	SUPPRESSION OF THE EPIGENETIC MODULATOR USP16 REVERSES AGING AND DEGENERATIVE FEATURES IN IN VITRO AND IN VIVO MODELS OF OSTEOARTHRITIS	M. Adorno, E. Besnard1, A. Joshi1, S. Brown1, H. Akbal1, B. Nicolis Di Robilant1, L. Rovati2,3, 1Dorian Therapeutics, San Carlos, CA, 2Univ. of Milano Bicocca, Milan, Italy, 3Rottapharm Biotech, Monza, Italy
504	THE COMBINATION OF DEPRESSION AND OBESITY ASSOCIATED WITH INCREASED INCIDENCE OF SUBSEQUENT TOTAL KNEE ARTHROPLASTY	C. E. Conley1, D. Landy1, C. Lattermann2, J. Borg-Stein3, J. Collins4, A-M. Vranceanu5, C. Jacobs2, 1Univ. of Kentucky, Lexington, KY, 2Mass Gen. Brigham Sports, Brigham and Women's Hosp., Boston, MA, 3Spaulding Rehabilitation Hosp., Boston, MA, 4Brigham and Women's Hosp., Boston, MA, 5Massachusetts Gen. Hosp., Boston, MA
505	ARE WE UNDERESTIMATING CARDIOVASCULAR DISEASE ONSET RISK FOR MALES AND FEMALES WITH OSTEOARTHRITIS?	A. Perruccio, C. Kral1, J. Wilfong1, L. Eder2, J. Power1, M. Canizares1, G. Heckman3, E. M. Badley1, 1Schroeder Arthritis Inst., Krembil Res. Inst., Univ. Hlth.Network, Toronto, ON, Canada, 2Women's Coll. Res. Inst., Toronto, ON, Canada, 3Univ. of Waterloo, Toronto, ON, Canada
506	DIAGNOSTIC ACCURACY OF ULTRASOUND FOR IDENTIFICATION OF RADIOGRAPHIC KNEE OA: THE JOHNSTON COUNTY OSTEOARTHRITIS PROJECT	K. A. Yates1, C. Alvarez1, T. A. Schwartz1, S. Savage-Guin1, J. B. Renner1, C. J. Bakewell2, M. J. Kohler3, J. Lin4, J. Samuels5, A. E. Nelson, 1Univ. of North Carolina, Chapel Hill, NC, 2Intermountain Hlth.Care, Salt Lake City, UT, 3Massachusetts Gen. Hosp./Harvard Med. Sch., Boston, MA, 4Stanford Hlth.Care, Palo Alto, CA, 5New York Univ. Langone Hlth., New York, NY
507	DEVELOPMENT OF CARTILAGE DAMAGE ON KNEE MRI AFTER ANTERIOR CRUCIATE LIGAMENT TEAR: EARLY ANTERIOR CRUCIATE LIGAMENT RECONSTRUCTION VERSUS REHABILITATION WITH OPTIONAL DELAYED ANTERIOR CRUCIATE LIGAMENT RECONSTRUCTION - A SECONDARY ANALYSIS OF A RANDOMIZED CONTROLLED TRIAL	B. Snoeker, Sr., F. Roemer, Sr.2, A. Turkiewicz, Sr.1, S. Lohmander, Sr.1, R. Frobell, Sr.1, M. Englund, Sr.1, 1Lund Univ., Lund, Sweden, 2Univ. of Erlangen, Erlangen, Germany
508	HIP GEOMETRIC PARAMETERS ARE ASSOCIATED WITH RADIOGRAPHIC AND CLINICAL HIP OSTEOARTHRITIS: FINDINGS FROM A CROSS-SECTIONAL STUDY IN UK BIOBANK	S. V. Heppenstall, R. Ebsim2, F. R. Saunders3, C. Lindner2, J. S. Gregory3, N. C. Harvey4, T. Cootes2, J. H. Tobias1, M. Frysz1, B. G. Faber1, 1Univ. of Bristol, Bristol, United Kingdom, 2Univ. of Manchester, Manchester, United Kingdom, 3Univ. of Aberdeen, Aberdeen, United Kingdom, 4Univ. of Southampton, Southampton, United Kingdom
509	IDENTIFICATION OF PHENOTYPE DIFFERENCES IN ARTICULAR CARTILAGE AND MENISCUS AT KNEE JOINT IN COLLAGEN XXII NULL MOUSE	A. Rubab, The Univ. of Hong Kong, Hong Kong, Hong Kong
510	IMPAIRED SYNOVIAL MACROPHAGE-MEDIATED EFFEROCYTOSIS IN A RAT MODEL OF POST-TRAUMATIC KNEE OSTEOARTHRITIS	L. Del Sordo, E. Sodhi, G. Blackler, M. Grol, B. Heit, C. T. Appleton, Univ. of Western Ontario, London, ON, Canada
511	MATRIX STIFFNESS AGGRAVATES OSTEOARTHRITIS PROGRESSION THROUGH H3K27ME3 DEMETHYLATION INDUCED BY MITOCHONDRIAL DAMAGE	T. Kan, H. Li, L. Hou, J. Cui, Y. Wang, L. Sun, L. Wang, M. Yan, Z. Yu, Shanghai Ninth People's Hosp., Shanghai Jiao Tong Univ. Sch. of Med., Shanghai, China
512	STRUCTURAL ANALYSIS ON POSTNATAL CARTILAGE DEVELOPMENT OF THE PATELLAR FEMORAL JOINT IN MICE	S. Hirata, K. Takahata, M. Yoneno, Y. Usami, T. Kokubun, Saitama Prefectural Univ., Koshigaya-shi, Japan

513	SYNOVIAL INVASION IN THE ACL-T MODEL MIGHT CAUSE UNEXPECTED CARTILAGE DEGENERATION IN THE EARLY STAGE	K. Takahata, K. Arakawa, H. Takahashi, M. Yoneno, T. Kokubun, Saitama Prefectural Univ., Koshigaya-shi, Japan
514	THE VARIED GENETIC IMPACT OF MEDIUM-TERM ANTERIOR CRUCIATE LIGAMENT INJURY ON ARTICULAR CARTILAGE AND SYNOVIUM	J. I. Donnenfield, B. C. Fleming ² , M. M. Murray ¹ , ¹ Boston Children's Hosp., Harvard Med. Sch., Boston, MA, ² Warren Alpert Med. Sch. of Brown Univ./ Rhode Island Hosp., Providence, RI
515	THE IMPACT OF PAIN ON FUNCIONAL ACTIVITIES IN INDIVIDUALS WITH HIP OSTEOARTHRITIS	C. d. Melo, P. R. Mendes da Silva Serrão, Sr., L. A. Selistre, Sr., Federal Univ. of São Carlos, São Carlos, Brazil
516	FEASIBILITY OF A PAIN INFORMED MOVEMENT PROGRAM FOR PEOPLE WITH SYMPTOMATIC KNEE OSTEOARTHRITIS	S. Modarresi ¹ , N. Pearson ² , K. Madden ¹ , M. Fahnestock ¹ , D. Bowdish ¹ , L. C. Carlesso, ¹ McMaster Univ., Hamilton, ON, Canada, ² Univ. of British Columbia, Vancouver, BC, Canada
517	STRUCTURAL DAMAGE AND EFFECTS ON KNEE PAIN DURING DIFFERENT ACTIVITIES AS ASSESSED BY THE WESTERN ONTARIO AND MCMASTER UNIVERSITIES OSTEOARTHRITIS INDEX (WOMAC)	C. Kwoh, F. Roemer ² , A. Guermazi ³ , E. L. Ashbeck ¹ , ¹ Univ. of Arizona Arthritis Ctr., Univ. of Arizona, Tucson, AZ, ² Univ. of Erlangen, Dept. of Radiology, Erlangen, Germany, ³ Boston Univ. Sch. of Med., Quantitative Imaging Ctr., Dept. of Radiology, Boston, MA
518	EXPLORING PAIN PHENOTYPES IN PEOPLE WITH EARLY KNEE OSTEOARTHRITIS:THE MULTICENTER OSTEOARTHRITIS STUDY (MOST)	Y. Neelapala ¹ , T. Neogi ² , D. Kumar ² , M. Jarraya ² , L. Frey-Law ³ , C. Lewis ⁴ , M. Nevitt ⁵ , D. Kobsar ¹ , L. Macedo ¹ , S. Hanna ¹ , T. Appleton ⁶ , T. Birmingham ⁶ , L. C. Carlesso, ¹ McMaster Univ., Hamilton, ON, Canada, ² Boston Univ., Boston, MA, ³ Univ. of Iowa, Iowa City, IA, ⁴ Univ. of Alabama at Birmingham, Birmingham, AL, ⁵ Univ. of California at San Francisco, San Francisco, CA, ⁶ Western Univ., London, ON, Canada
519	TISSUEGENE-C INDUCES LONG-TERM ANALGESIC EFFECTS THROUGH MODULATION OF PAIN MEDIATORS AND NEURONAL SENSITIZATION IN A MONOIODOACETATE-INDUCED OSTEOARTHRITIS PAIN RAT MODEL.	E. Park, J. Seo ² , Y. Lee ² , K. Park ² , K-r. Kim ² , H. Lee ³ , S. Lee ³ , S. Kim ² , A. Mobasher ^{4,5,6,7} , H. Choi ³ , ¹ Dept. of Physiology, Coll. of Med. and NeuroSci. Res. Inst., Korea Univ., Seoul, Korea, Republic of, ² Inst. of BioInnovation Res., Kolon Life Sci., Inc., Seoul, Korea, Republic of, ³ Hlth.care Res. Inst., Kolon Advanced Res. Cluster, Seoul, Korea, Republic of, ⁴ Res. Unit of Hlth.Sci. and Technology, Faculty of Med., Univ. of Oulu, Oulu, Finland, ⁵ Dept. of Regenerative Med., State Res. Inst. Ctr. for Innovative Med., Vilnius, Lithuania, ⁶ World Hlth.Organization Collaborating Ctr. for Publ. Hlth.Aspects of Musculoskeletal Hlth.and Aging, Université de Liège, Liège, Belgium, ⁷ Dept. of Joint Surgery, the First Affiliated Hosp., Sun Yat-sen Univ., Guangdong, China
520	FUNCTIONAL MRI FOLLOWING SENSORY STIMULATION IN MONOSODIUM IODOACETATE MODEL OF OSTEOARTHRITIS PAIN	P. Lehtinen, P. Stenroos ² , H. Koivisto ² , S. Häkli ² , H. Tanila ² , O. Gröhn ² , A. Domanskyi ¹ , C. Stenfors ¹ , ¹ Orion Corp., Turku, Finland, ² Univ. of Eastern Finland, Kuopio, Finland
521	EFFECTS OF ENERGY RESTRICTION AND EXERCISE ON PAIN AND INFLAMMATION IN PATIENTS WITH KNEE OSTEOARTHRITIS	J. L. Bilzon, R. Deere ¹ , M. Farrow ¹ , E. Chowdhury ² , D. Thompson ¹ , ¹ Univ. of Bath, Bath, United Kingdom, ² Versus Arthritis, London, United Kingdom
522	ONE-YEAR OUTCOMES FOLLOWING REHABILITATION FOR CHRONIC HIP-RELATED GROIN PAIN: ANCILLARY ANALYSIS OF A PILOT RANDOMIZED CLINICAL TRIAL	M. Harris-Hayes, P. Zorn ² , K. Steger-May ¹ , B. Joanna ¹ , B. M. Megan ¹ , R. D. DeMarge ¹ , K. Suzanne ¹ , J. C. Clohisy ¹ , S. Haroutounian ¹ , ¹ Washington Univ. Sch. of Med., Saint Louis, MO, ² , Patricia Zorn Ctr. for Physical Therapy and Spine Rehabilitation, Saint Louis, MO
523	ACCELERATED AGE-RELATED DECLINE IN QUADRICEPS MUSCLE QUALITY IN THE SETTING OF KNEE OSTEOARTHRITIS: A SYSTEMATIC REVIEW WITH NETWORK META-ANALYSIS	A. Hoki, E. D'Amico ² , F. Ambrosio ^{3,4} , Y. Matsuda ^{1,5} , H. Iijima ^{6,7} , ¹ Matsuda orthopedic clinic, Saitama, Japan, ² Univ. of Pittsburgh, Pittsburgh, PA, ³ Spaulding Rehabilitation Hosp. and Harvard Med. Sch., Boston, MA, ⁴ Schoen Adams Res. Inst. at Spaulding, Boston, MA, ⁵ Josai Univ., Saitama, Japan, ⁶ Nagoya Univ., Nagoya, Japan, ⁷ Nagoya Univ. Graduate Sch. of Med., Nagoya, Japan

524	THINKING DIFFERENTLY: EVIDENCE ON WHAT PATIENTS WANT AND NEED IN AN EXPLANATION ABOUT OSTEOARTHRITIS	C. Jinks, L. Campbell ¹ , P. R. Croft ¹ , K. S. Dziedzic ¹ , H. Grossman ² , J. Maddison ¹ , C. Main ¹ , C. McRobert ³ , E. Nicholls ¹ , Z. Paskins ^{1,4} , G. Peat ⁵ , J. Protheroe ¹ , J. Quicke ^{1,6} , N. Shivji ¹ , L. Cottrell ⁷ , ¹ Keele Univ., Keele, United Kingdom, ² OvGU Magdeburg, Magdeburg, Germany, ³ Univ. of Liverpool, Liverpool, United Kingdom, ⁴ Midlands Partnership NHS Fndn. Trust, Stoke on Trent, United Kingdom, ⁵ Sheffield Hallam Univ., Sheffield, United Kingdom, ⁶ Chartered Society of Physiotherapy, London, United Kingdom, ⁷ Wolstanton Med. Ctr., Newcastle Under Lyme, United Kingdom
525	EFFECTS OF STRENGTH FOCUSED, MULTIDISCIPLINARY ONLINE PREHABILITATION ON PAIN AND FUNCTION IN LONG WAITER (>52 WEEKS) KNEE ARTHROPLASTY PATIENTS; THE JOINT APPROACH PROGRAMME.	C. Minshull, S. Simmons ² , Y. Rimmer ³ , I. Malek ³ , M. Brownlow ^{1,4} , ¹ Joint Approach Rehab Ltd, Nottingham, United Kingdom, ² Nottingham Trent Univ., Nottingham, United Kingdom, ³ Betsi Cadwaladr Univ. Hlth.Board, Wrexham, United Kingdom, ⁴ English Inst. of Sport, Manchester, United Kingdom
526	EVALUATION OF A KNOWLEDGE MOBILISATION MEETING BETWEEN PEOPLE WITH OSTEOARTHRITIS AND RESEARCHERS IN THE FIELD OF OSTEOARTHRITIS.	M. Chamoro, U. Sharma, E. Molendijk, S. M. Bierma-Zeinstra, R. Rozendaal, M. van Middelkoop, D. Schiphof, Erasmus MC, Rotterdam, Netherlands
527	A FEASIBILITY STUDY OF COMBINED TREATMENT USING AEROBIC EXERCISE AND DULOXETINE IN ADULTS WITH SYMPTOMATIC KNEE OSTEOARTHRITIS AND COMORBID DEPRESSION	A. M. Rathbun, R. Mehta ¹ , A. S. Ryan ¹ , Y. Dong ¹ , B. A. Beamer ¹ , J. Golden ¹ , J. J. Gallo ² , M. R. Luborsky ³ , M. D. Shardell ¹ , J. E. Peer ¹ , M. C. Hochberg ¹ , ¹ Univ. of Maryland Sch. of Med., Baltimore, MD, ² John Hopkins Bloomberg Sch. of Publ. Hlth., Baltimore, MD, ³ Wayne State Univ., Detroit, MI
528	SUPPORTED MOTIVATIONAL INTERVIEWING (SUMIT) TO IMPROVE PHYSICAL ACTIVITY FOR PEOPLE WITH KNEE OSTEOARTHRITIS. A PILOT, FEASIBILITY RANDOMISED CONTROLLED TRIAL.	E. C. Bell, P. O'Halloran ¹ , J. A. Wallis ² , K. M. Crossley ¹ , A. Gibbs ¹ , L. Annemarie ² , S. Jennings ³ , C. J. Barton ¹ , ¹ La Trobe Univ., Bundoora, Australia, ² Monash Univ., Melbourne, Australia, ³ Cabrini Hlth., Malvern, Australia
529	A 12-WEEK USER TRIAL OF THE INTELLIGENT KNEE OSTEOARTHRITIS LIFESTYLE APP	R. D. Stevenson, Univ. of Bath, Bath, United Kingdom
530	THE DESCRIPTION OF KNEE BRACE INTERVENTIONS FOR KNEE OSTEOARTHRITIS: A REVIEW OF PUBLISHED RANDOMISED CONTROLLED TRIALS	M. Holden, M. Murphy ² , J. Simkins ¹ , M. Thomas ¹ , J. Quicke ¹ , L. Huckfield ¹ , G. Peat ³ , the PROP OA Trial Team, ¹ Keele Univ., Keele, United Kingdom, ² RJAH Orthopaedic NHS Fndn. Trust, Oswestry, United Kingdom, ³ Sheffield Hallam Univ., Sheffield, United Kingdom
531	THE IMPACT OF COVID-19 LOCKDOWN ON OLDER ADULTS WITH PERSISTENT JOINT PAIN: OBJECTIVE AND SELF-REPORTED MEASURES OF PHYSICAL ACTIVITY, WALKING AND SEDENTARY BEHAVIOUR	E. L. Healey, E. Nicholls, C. Woodcock, C. A. Chew-Graham, S. A. Lawton, C. Jinks, on behalf of the iPOPP study team, Keele Univ., Newcastle-under-Lyme, United Kingdom