

Only Sessions marked as “English”
will be conducted in English

The 99th Annual Meeting of the Japanese Orthopaedic Association (II)

May 21-24, 2026 Kobe
Congress President: Sakae Tanaka, M.D.
Orthopaedic Surgery, Sensory and Motor System Medicine,
Surgical Sciences, Graduate School of Medicine, The University of Tokyo

3rd Day May 23 Room 1

8 : 00 ~ 9 : 20 **Symposium 47** **Moderators N. Iwasaki, S. Okada**
A century of advances: Basic research

- 3-1-S47-1 Bone and mineral research *Hiroshi Takayanagi*, Dept. of Immunology,
Graduate School of Medicine and Faculty of Medicine, The Univ. of Tokyo...S579
- 3-1-S47-2 Frontiers in rheumatology: Toward future treatments for intractable rheumatic diseases
..... *Masaru Ishii*, Dept. of Immunology and Cell Biology,
Graduate School of Medicine, The Univ. of Osaka...S579
- 3-1-S47-3 Advances in biomaterials research aimed at bone quality medicine
..... *Takayoshi Nakano*, Graduate School of Engineering, The Univ. of Osaka...S580
- 3-1-S47-4 Advances in genome research and orthopaedics
..... *Koichi Matsuda*, Graduate School of Frontier Science, The Univ. of Tokyo...S580
- 3-1-S47-5 Regenerative medicine for the central nervous system: Progress over the past 20 years and
future prospects *Hideyuki Okano*, Keio Univ. Regenerative Medicine Research Center...S581

9 : 35 ~ 10 : 35 **Special lecture 1** **Moderator H. Akiyama**

- 3-1-SL1 Science and technology: Essential to Japan’s survival
..... *Ryoji Noyori*, Center for Research and Development Strategy (CRDS),
Japan Science and Technology Agency (JST)...S582

10 : 45 ~ 11 : 45 **Special lecture 2** **Moderator H. Kawano**

- 3-1-SL2 Clinical research in a time of medical transformation *Ryozo Nagai*, Jichi Medical Univ...S582

13 : 25 ~ 14 : 25 **Keynote lecture** **Moderator S. Tanaka**

- 3-1-KL From abiogenesis to ChatGPT: A new emergence after 3.8 billion years
..... *Shinichi Nishikawa*, NPO Corporation All About Science Japan...S583

14 : 40 ~ 15 : 40 **Special lecture 3** **Moderator Y. Ishibashi**

- 3-1-SL3 The theory of mastery *Dai Tamesue*, Deportare Partners...S583

17 : 20 ~ 18 : 40 **Symposium 48** **Moderators M. Matsumoto, Y. Nakashima**
A century of advances: Clinical practice

- 3-1-S48-1 Advances in spine and spinal cord surgery in Japan
..... *Masaya Nakamura*, Dept. of Orthop. Surg., Keio Univ...S584
- 3-1-S48-2 Knee surgery: Progress in the past 100 years
..... *Ryosuke Kuroda, et al.*, Dept. of Orthop. Surg., Kobe Univ. Graduate School of Medicine...S584
- 3-1-S48-3 Advancements in hip surgery
..... *Nobuhiko Sugano*, Dept. of Arthroplasty Center, Kawanishi City Medical Center...S585

- 3-1-S48-4 If you are an orthopaedic surgeon, study diligently: Advances in shoulder joint
 *Shinji Imai*, Dept. of Orthop. Surg., Shiga Univ. of Medical Science...S585
- 3-1-S48-5 A century of clinical progress in foot and ankle surgery ... *Hisateru Niki*, Fuchu Keijinkai Hosp...S586
- 3-1-S48-6 Advances and current status of hand surgery *Akinori Sakai*, Dept. of Orthop. Surg.,
 School of Medicine, Univ. of Occupational and Environmental Health...S586

3rd Day May 23 Room 2

8 : 00 ~ 9 : 20 JOA Directors' proposed symposium 5 Moderators T. Ohe, K. Goto
Osteoporosis management strategies to reduce locomotive syndrome: A multifaceted approach

- 3-2-JS5-1 The concept of locomotive syndrome, related policies, and public relations activities of the
 Japanese Orthopaedic Association *Takashi Ohe*, NTT Medical Center Tokyo...S587
- 3-2-JS5-2 Locomo sign: Initiatives of the Japanese Orthopaedics Association to reduce
 locomotive syndrome
 *Keiko Yamada*, Saitama Prefecture Univ./Dept. of Rehabilitation, Univ. of Tokyo Hosp...S587
- 3-2-JS5-3 Osteoporosis prevention as a strategy to reduce locomotive syndrome
 *Yukio Nakamura, et al.*, Aichi Medical Univ...S588
- 3-2-JS5-4 Patient education including nutritional management from the perspective of locomotive
 syndrome prevention
 *Takeshi Miyamoto*, Dept. of Orthop. Surg., Faculty of Life Sciences, Kumamoto Univ...S588
- 3-2-JS5-5 Rehabilitation strategies for locomotive syndrome and osteoporosis
 *Hiroshi Horiuchi, et al.*, Dept. of Orthop. Surg.,
 Kekeyu-Misayama Rehabilitation Center, Kekeyu Hosp...S589

9 : 35 ~ 10 : 55 JOA Directors' proposed symposium 6 Moderators K. Yamauchi, H. Hara
Considering the gender gap among orthopaedic surgeons and future career development (English)

- 3-2-JS6-1 Current status and challenges of the gender gap in academic societies
 *Sumiko Nagoshi*, Dept. of Gastr. & Hep., Saitama Medical Center, Saitama Medical Univ...S590
- 3-2-JS6-2 Gender gaps and career support in orthopaedic clinical practice
 *Satomi Nagamine, et al.*, Dept. of Orthop. Surg., Saga Univ...S590
- 3-2-JS6-3 Bridging the gender gap in orthopaedic surgery: Perspectives on academic career development
 *Natsumi Saka, et al.*, Dept. of Orthop. Surg., Teikyo Univ...S591
- 3-2-JS6-4 Gender gap and optimizing career support for Asia Pacific orthopaedic surgeons
 *Margaret Wm Fok*, Dept. of Orthop. Surg., Queen Mary Hosp., HK Univ., HKSAR...S591
- 3-2-JS6-5 Advancing diversity in the Japanese Urological Association: Addressing the gender gap through
 men-women collaboration *Sachiyo Nishida*, Dept. of Urology, Sapporo Medical Univ...S592

11 : 00 ~ 11 : 50 Free papers 44 Rotator cuff injury 2 Moderators H. Sugaya, T. Izaki

- 3-2-1 Diagnostic value of depression sign in partial supraspinatus tears: Association with bursal and
 intratendinous tears *Moehito Sakaida, et al.*, Dept. of Orthop. Surg., Jyuzen Memorial Hosp...S593
- 3-2-2 Two-year longitudinal evaluation of improvement in humeral head displacement after superior
 capsule reconstruction for irreparable rotator cuff tears
 *Yoshihiko Nagata, et al.*, Dept. of Orthop. Surg., Hiroshima-Nishi Medical Center...S593
- 3-2-3 MRI findings of subscapularis tear
 *Hiroki Ohzono, et al.*, Dept. of Orthop. Surg., Kurume Univ. Medical Center...S594
- 3-2-4 Risk factors for poor prognosis after ARCR for massive rotator cuff tears in patients aged 65 years
 and older *So Taniguchi, et al.*, Dept. of Orthop. Surg., Ishikiriseiki Hosp...S594

3-2-5 Re-evaluation of re-tear rates following ARCR with muscle advancement based on the Stump classification *Yusuke Mori, et al.*, Dept. of Orthop. Surg., Hankai Hosp. ...S595

12 : 00 ~ 13 : 10 Luncheon seminar 25 Moderator S. Imagama

3-2-LS25-1 Cervical disorders and neuropathic pain in the Smartphone Era: Evidence from a randomized controlled trial and future perspectives *Takashi Hirai*, Dept. of Orthop. and Spinal Surg., Graduate School of Medical and Dental Sciences, Institute of Science Tokyo ...S596

3-2-LS25-2 Advances in the treatment of lumbar disc herniation and neuropathic pain: Emerging clinical evidence *Hidenori Suzuki*, Dept. of Orthop. Surg., Yamaguchi Univ. Graduate School of Medicine ...S596

13 : 25 ~ 14 : 25 JOA Directors' proposed lecture 1 Moderators H. Taneichi, K. Takahashi

3-2-JEL1-1 Mind the ethical trap: Lessons for CST participants *Takane Suzuki*, Dept. of Bioenvironmental Medicine, Graduate School of Medicine, Chiba Univ. ...S597

3-2-JEL1-2 CST operations for sustainable cadaver labs *Toshiaki Shichinohe*, Center for Education Research & Innovation of Advanced Medical Technology, Hokkaido Univ. Hosp. ...S597

14 : 40 ~ 15 : 40 JOA/AAOS combined program: Instructional lecture 1 Total hip arthroplasty (English) Moderators Y. Nakashima, T. Sakai

3-2-ICL1-1 Leveraging advances in implant design and instrumentation to address complex primary and revision total hip arthroplasty: Case based discussion *Erik Hansen*, American Academy of Orthopaedic Surgeons ...S598

3-2-ICL1-2 Implant design in total hip arthroplasty *Jeremy M. Gililland*, American Academy of Orthopaedic Surgeons ...S598

15 : 55 ~ 16 : 55 JOA/AAOS combined program: Instructional lecture 2 Total knee arthroplasty (English) Moderators Y. Ishibashi, S. Matsuda

3-2-ICL2-1 TKA implant design and kinematics *Timothy M. Wright*, American Academy of Orthopaedic Surgeons ...S599

3-2-ICL2-2 Patient-specific surgery in TKA *Nathanael Heckmann*, American Academy of Orthopaedic Surgeons ...S599

17 : 10 ~ 18 : 40 JOA/AAOS combined symposium Moderators W.K. Gibson, M. Takao THA/TKA up to date: Latest findings to improve patient satisfaction (English)

3-2-CS-1 Robotic technology in hip and knee arthroplasty: The U.S. landscape in 2026 *Matthew J. Grosso*, American Academy of Orthopaedic Surgeons ...S600

3-2-CS-2 Midflexion laxity assessment using a novel multiplanar arthrometer at 3-months following cruciate-retaining total knee arthroplasty and its relationship with PROMs *Brian P. Chalmers*, American Academy of Orthopaedic Surgeons ...S600

3-2-CS-3 Trends in total hip arthroplasty *Linda Suleiman*, American Academy of Orthopaedic Surgeons ...S601

3-2-CS-4 Robotic-assisted hip and knee arthroplasties *Masahiro Hasegawa, et al.*, Dept. of Musculoskeletal Surg., Dept. of Multimodality Therapy for Cancer, Mie Univ. Graduate School of Medicine ...S601

3-2-CS-5 Evolving alignment strategies in total knee arthroplasty *Ken Okazaki*, Dept. of Orthop. Surg., Tokyo Women's Medical Univ. ...S602

- 3-2-CS-6 Trends in total hip arthroplasty: Evolving indications, techniques, and implant strategies
*Koji Goto*, Dept. of Orthop. Surg., Kindai Univ. Faculty of Medicine...S602

3rd Day May 23 Room 3

**8 : 00 ~ 9 : 20 JOA Directors' proposed symposium 7 Moderators A. Terakado, Y. Kawaguchi
 The impact of big data on orthopaedic surgeons: Perspectives on medical fee revision**

- 3-3-JS7-1 Utilizing NCD data for healthcare policy development
*Norihiko Ikeda*, National Clinical Database...S603
- 3-3-JS7-2 Creating real-world evidence from the JOANR registry: Design, outputs, and future directions
*Mitsuru Yagi, et al.*, Dept. of Orthop. Surg., International Univ. of Health and Welfare...S603
- 3-3-JS7-3 Impact on the activities of the Social Insurance Committee
*Yutaka Hiraizumi*, Dept. of Orthop. Surg., Showa Medical Univ./Seijo Rehabilitation Hosp....S604
- 3-3-JS7-4 Bone and soft tissue tumor registry in the context of medical fee revision: Current situation
 and issues*Takeshi Morii, et al.*, Dept. of Orthop. Surg., Kyorin Univ....S604
- 3-3-JS7-5 Big data spine: Real-world evidence driving fair reimbursement in Japan
*Takashi Hirai, et al.*, Dept. of Orthop. and Spinal Surg.,
 Graduate School of Medical and Dental Sciences, Institute of Science Tokyo...S605

**9 : 35 ~ 10 : 55 JOA Directors' proposed symposium 8 Moderators T. Kanemura, M. Saito
 Registry research: Generating evidence using real-world data**

- 3-3-JS8-1 Future medicine led by real-world data
*Hideo Yasunaga*, Dept. of Clinical Epidemiology and Health Economics, The Univ. of Tokyo...S606
- 3-3-JS8-2 National clinical database: A platform for quality assessment, improvement, and
 evidence generation
*Hiraku Kumamaru*, Yokohama City Univ. Graduate School of Data Science...S606
- 3-3-JS8-3 RWD and RCT: From complementary roles to learning from each other
*Tomohiro Shinozaki*, Interfaculty Initiative in Information Studies, The Univ. of Tokyo...S607
- 3-3-JS8-4 How big data from JOANR informs reimbursement reform in Japan
*Mitsuru Yagi, et al.*, Dept. of Orthop. Surg., International Univ. of Health and Welfare...S607
- 3-3-JS8-5 Current status of registry-based research using JSSR-DB
*Hideyuki Arima, et al.*, Database Committee,
 Japanese Society for Spine Surg. and Related Research...S608

11 : 00 ~ 11 : 50 Free papers 45 Tumor: Basic research Moderators M. Hakozaiki, M. Hirata

- 3-3-1 The immune microenvironment of infiltrative soft tissue sarcomas: Unraveling insights from both
 the tumor inside and marginal regions*Akane Ariga, et al.*, Dept. of Orthop. and Spinal Surg.,
 Graduate School of Medical and Dental Sciences, Institute of Science Tokyo...S609
- 3-3-2 Single-nucleus multi-omics integration of transcriptomic and epigenomic profiles in giant cell tumor
 of bone*Yo Kimura, et al.*, Div. of Cellular Signaling, National Cancer Center Research Institute...S609
- 3-3-3 Identification of new prognostic factors and therapeutic agents for myxoid liposarcoma by
 proteogenomic approach*Yuki Funauchi, et al.*, Dept. of Orthop. and Spinal Surg.,
 Graduate School of Medical and Dental Sciences, Institute of Science Tokyo...S610
- 3-3-4 Comparative proteomic analysis of formalin-fixed paraffin-embedded specimens identifies
 therapeutic efficacy of proteasome inhibitors for malignant peripheral nerve sheath tumors
*Makoto Emori, et al.*, Dept. of Orthop. Surg., Sapporo Medical Univ....S610
- 3-3-5 Bone mineral density change after discontinuation of denosumab for bone metastases: AI-CT
 longitudinal cohort study*Suguru Yokoo, et al.*, Dept. of Orthop. Surg., Fukuyama City Hosp....S611

12 : 00 ~ 13 : 10	Luncheon seminar 26	Moderator T. Yamasaki
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- 3-3-LS26-1 Personalized total hip arthroplasty combined with capsular ligament reserving approach and dual mobility cup*Daigo Sakagoshi*, Dept. of Orthop. Surg., Nekoyamamiyao Hosp. ...S612
- 3-3-LS26-2 Non-invasive portable navigation system for total hip arthroplasty.
.....*Ryohei Takada, et al.*, Dept. of Orthop. Surg., Institute of Science Tokyo Hosp. ...S612

13 : 25 ~ 14 : 25	Instructional lecture 27	Moderator M. Saito
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- 3-3-EL27 Welcome to the world of statistical genetics*Yukinori Okada*, Dept. of Genome Informatics, Graduate School of Medicine, The Univ. of Tokyo ...S613

14 : 40 ~ 15 : 40	Instructional lecture 28	Moderator Y. Kawaguchi
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- 3-3-EL28 Current status and future perspectives of robot-assisted surgery in spinal surgery
.....*Takanori Saito*, Dept. of Orthop. Surg., Kansai Medical Univ. ...S613

15 : 55 ~ 16 : 55	JOA Directors' proposed lecture 2	Moderator H. Kawano
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- 3-3-JEL2-1 Specialist training and undergraduate/graduate clinical education: Shaping the future of medical education in Japan and the training of orthopaedic surgeons
.....*Yasuhiko Konishi*, Div. of Medical Education, Juntendo Univ. ...S614

17 : 10 ~ 18 : 10	Instructional lecture 29	Moderator N. Iwasaki
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- 3-3-EL29 Weaving the future of healthcare through digital transformation
.....*Kengo Miyo*, Artificial Intelligence and Digital Twin in Healthcare, Graduate School of Medicine, The Univ. of Tokyo ...S614

3rd Day May 23 Room 4

8 : 00 ~ 9 : 00	Instructional lecture 30	Moderator Y. Ishibashi
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- 3-4-EL30 The importance of regulatory science in next-generation medical technology development
.....*Ichiro Sakuma*, Research Institute for Science and Technology, Center for Research and Collaboration, Tokyo Denki Univ. ...S615

9 : 15 ~ 10 : 15	Instructional lecture 31	Moderator S. Arai
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- 3-4-EL31 Healthcare policy with an eye to 2040: Policy issues and prospects for a hopeful future of healthcare*Masami Sakoi*, Ministry of Health, Labour and Welfare ...S615

10 : 30 ~ 11 : 30	Free papers 46 Knee: OA 1	Moderators K. Hayakawa, E. Tsuda
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- 3-4-1 Synovitis and bone marrow lesions are the risk factors for the progression of knee osteoarthritis: The Bunkyo Health Study*Jun Shiozawa, et al.*, Dept. of Orthop., Juntendo Univ. ...S616
- 3-4-2 Association between imaging findings and clinical outcomes in patellofemoral osteoarthritis: An analysis using SPECT-CT and radiography
.....*Yuki Nagaoka, et al.*, Dept. of Orthop. Surg., Akita Univ. Graduate School of Medicine ...S616
- 3-4-3 Relationship between bone mineral density distribution in tibial subchondral bone and articular cartilage thickness as measured by CT-osteabsorptiometry
.....*Seiya Moriyama*, Dept. of Orthop. Surg., Faculty of Medicine and Graduate School of Medicine, Hokkaido Univ. ...S617
- 3-4-4 Predictive factors for responding to cooled radiofrequency ablation in knee osteoarthritis
.....*Hironori Kitajima, et al.*, Dept. of Orthop. Surg., Kanazawa Medical Univ. ...S617

- 3-4-5 Short-term results of cooled radiofrequency ablation for knee osteoarthritis
 *Fumihiko Konishi*, Dept. of Orthop. Surg., Ehime Seikyo Hosp. ...S618
- 3-4-6 Optimal frequency of platelet-rich plasma injections for managing osteoarthritis:
 A longitudinal study *Masahiko Kemmochi*, Kenmochi Orthop. Surg. Sports Clinic ...S618

12 : 00 ~ 13 : 10 Luncheon seminar 27 Moderator E. Itoi

- 3-4-LS27 The essence of being a doctor in the AI era: Pain and empathy as a bridge across a century
 *Hiroshi Minagawa*, Joto Orthop. Clinic ...S619

**13 : 25 ~ 14 : 45 JOA Directors' proposed symposium 9 Moderators N. Takahashi, H. Kawano
 Nutrition, frailty, skeletal muscle mass, and cardiovascular diseases:
 Interplay between the cardiovascular and
 musculoskeletal systems in the era of 100-year lifespan**

- 3-4-JS9-1 Impact of frailty and nutritional status on prognosis after percutaneous coronary intervention
 for ischemic heart disease *Hideo Amano, et al.*, Div. of Cardiovascular Medicine,
 Dept. of Internal Medicine, Faculty of Medicine, Toho Univ. ...S620
- 3-4-JS9-2 Significance of nutritional status in ventricular arrhythmia occurrence and all-cause mortality
 in patients with heart failure undergoing cardiac resynchronization therapy
 *Hidekazu Kondo, et al.*, Dept. of Cardiology and Clinical Examination,
 Faculty of Medicine, Oita Univ. ...S620
- 3-4-JS9-3 Locomotive syndrome in patients undergoing cardiac rehabilitation
 *Yoshitada Sakai, et al.*, Div. of Rehabilitation Medicine,
 Kobe Univ. Graduate School of Medicine ...S621
- 3-4-JS9-4 Impact of locomotive syndrome improvement on cardiovascular prognosis
 *Yusuke Shinoda*, Dept. of Rehabilitation Medicine, Saitama Medical Univ. ...S621

15 : 00 ~ 16 : 00 Free papers 47 Lower limb trauma Moderators H. Okazaki, K. Nozaka

- 3-4-7 Patient background and treatment outcomes for atypical femoral fractures
 *Yumiko Watanabe, et al.*, Dept. of Orthop. Surg.,
 Sugita Genpaku Memorial Obama Municipal Hosp. ...S622
- 3-4-8 Confirmation for the progression of femoral bowing deformity by longitudinal morphological analysis
 *Takumi Kaku, et al.*, Dept. of Orthop. and Spinal Surg.,
 Graduate School of Medical and Dental Sciences, Institute of Science Tokyo ...S622
- 3-4-9 Finite element analysis of stress distribution changes based on plate fixation methods for distal
 femoral fractures
 *Yoshinori Satake, et al.*, Dept. of Orthop. Surg., Kochi Medical School, Kochi Univ. ...S623
- 3-4-10 Risk factors for surgical conversion in traumatic patellar dislocation treated conservatively:
 A study using a patellar tester *Takuya Wakatsuki, et al.*, Dept. of Orthop., Shimane Univ. ...S623
- 3-4-11 Relationship between gravity stress radiograph and deltoid ligament injury in isolated lateral
 malleolar fractures *Shuhei Hiyama, et al.*, Dept. of Orthop., Jichi Medical Univ. ...S624
- 3-4-12 Accuracy of the incisura tangent method for syndesmotic reduction for ankle malleolar fracture:
 A cadaveric study
 *Seiji Kimura, et al.*, Dept. of Orthop. Surg., Graduate School of Medicine, Chiba Univ. ...S624

16 : 30 ~ 17 : 30 Free papers 48 Knee: Osteotomy 1 Moderators T. Akiyama, H. Ogawa

- 3-4-13 Return to work after inverted V-shaped high tibial osteotomy for severe medial knee osteoarthritis
 *Taku Ebata, et al.*, Dept. of Orthop. Surg.,
 Faculty of Medicine and Graduate School of Medicine, Hokkaido Univ. ...S625

- 3-4-14 Long-term clinical outcomes of opening wedge high tibial osteotomy using the Puddu plate:
Are short plates a treatment option?
.....*Keinosuke Ryu, et al.*, Dept. of Orthop. Surg., Fukushima Medical Univ.···S625
- 3-4-15 Does HCWHTO improve knee joint ROM?: An investigation into the relationship between pre- and
postoperative PTS and ROM
.....*Moritaka Maruyama, et al.*, Dept. of Orthop. Surg., Iwate Medical Univ.···S626
- 3-4-16 Mid-term outcomes of medial closed-wedge distal femoral osteotomy for valgus knees
.....*Nobuyoshi Suzuki, et al.*, Dept. of Orthop. Surg., Osaka Kaisei Hosp.···S626
- 3-4-17 Bone union and hinge fracture in DTO: Focus on the angle between the two osteotomy plane and
Gerdy's tubercle*Masato Hara, et al.*, Dept. of Orthop. Surg.,
Faculty of Medicine and Graduate School of Medicine, Hokkaido Univ.···S627
- 3-4-18 Effect of sagittal osteotomy inclination on proximal tibiofibular joint level and hinge in proximal
tibial osteotomy*Shinya Kawahara, et al.*, Dept. of Orthop. Surg.,
Clinical Medicine, Graduate School of Medical Sciences, Kyushu Univ.···S627

17 : 30 ~ 18 : 30	Free papers 49	Knee: Osteotomy 2	Moderators	R. Nakamura, A. Maeyama
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- 3-4-19 Association of trochlear cartilage degeneration with midterm outcomes after around-knee
osteotomy: 331-case analysis
.....*Yuki Kato, et al.*, Joint Preservation & Reconstruction Center, Kameda Medical Center···S628
- 3-4-20 The effect of double level osteotomy on ankle alignment: A radiological study
.....*Kohei Hamasaki, et al.*, Dept. of Orthop. Surg., Yokohama City Univ. Hosp.···S628
- 3-4-21 Association between subchondral bone density across knee joint and clinical outcome following
osteotomy around knee for medial knee osteoarthritis
.....*Koji Iwasaki, et al.*, Dept. of Functional Reconstruction for the Knee Joint,
Faculty of Medicine and Graduate School of Medicine, Hokkaido Univ.···S629
- 3-4-22 Comparison of bone formation between an octacalcium phosphate-gelatin composite and
beta-tricalcium phosphate in medial opening-wedge distal tibial tuberosity osteotomy
.....*Naohisa Miyatake, et al.*, Tohoku Orthop. Clinic···S629
- 3-4-23 Comparison of postoperative weight-bearing line changes and clinical outcomes between
individualized HTO with centralization vs. Fujisawa Point-targeted HTO alone
.....*Kazushi Horita, et al.*, Dept. of Orthop. Surg., Sapporo Medical Univ.···S630
- 3-4-24 Assessment of the relationship between anteroposterior screw placement and the popliteal artery
in distal tuberosity osteotomy
.....*Jun Takagaki, et al.*, Dept. of Orthop. Surg., Hyogo Prefectural Rehabilitation Center Hosp.···S630

3rd Day May 23 Room 5

8 : 00 ~ 9 : 00	Instructional lecture 32	Moderator	S. Lee
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- 3-5-EL32 Treatment strategies for nonunion
.....*Tomohiro Matsumura*, Dept. of Tochigi Disaster Medicine, Jichi Medical Univ.···S631

9 : 15 ~ 10 : 15	Instructional lecture 33	Moderator	Y. Watanabe
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- 3-5-EL33 Mastering the treatment of periprosthetic fractures
.....*Tomonori Baba*, Dept. of Orthop., Juntendo Univ.···S631

10 : 30 ~ 11 : 30 Free papers 50

Moderators M. Ito, Y. Oh

Periprosthetic fracture and fracture fixation device

- 3-5-1 ORIF vs. Revision for Vancouver B2/B3 periprosthetic femoral fractures after bipolar hemiarthroplasty: Multicenter retrospective TRON study
..... *Koki Miyagawa*, Dept. of Orthop. Surg., Tono Kosei Hosp. ...S632
- 3-5-2 Postoperative outcomes of the reconstruction method with cemented long stem and the lateral plate for peri-prosthetic proximal femur fractures
..... *Hitoshi Wakama, et al.*, Dept. of Orthop. Surg., Osaka Medical and Pharmaceutical Univ. ...S632
- 3-5-3 Investigation of optimal placement of locking attachment plate in periprosthetic femoral fractures: A biomechanical comparative study *Koki Omori, et al.*, Dept. of Orthop., Juntendo Univ. ...S633
- 3-5-4 Treatment of non-prosthetic peri-implant fractures (NPPIFs) of the upper limbs
..... *Rei Matsushima, et al.*, Dept. of Orthop. Surg., Tokyo Bay Urayasu Ichikawa Medical Center ...S633
- 3-5-5 Development of magnesium alloy implants for fracture treatment
..... *Kosei Takata, et al.*, Dept. of Orthop. Surg., Kumamoto Univ. Hosp. ...S634
- 3-5-6 Patient adherence for low-intensity pulsed ultrasound treatment: Analysis of risk factors for poorer adherence *Sang Yang Lee, et al.*, Dept. of Orthop. Surg., Keijinkai Shiroyama Hosp. ...S634

12 : 00 ~ 13 : 10 Luncheon seminar 28

Moderator H. Iwasaki

- 3-5-LS28 The metamorphosis of orthopaedic practice: Ultrasound-driven diagnosis and treatment of neuropathic pain *Kazuma Miyatake*, Musculoskeletal Science, Yokohama City Univ. Graduate School of Medicine ...S635

13 : 25 ~ 14 : 45 JOA Directors' proposed symposium 10

Moderators R. Kuroda, D. Sakai

International exchange with various countries: Through the ages

- 3-5-JS10-1 JOA's international exchange programs, past and present
..... *Masahiko Takahata, et al.*, Dept. of Orthop. Surg., Dokkyo Medical Univ. ...S636
- 3-5-JS10-2 Past, present and future for Japan-France relationship of orthopaedic surgery
..... *Shinji Imai*, Dept. of Orthop. Surg., Shiga Univ. of Medical Science ...S636
- 3-5-JS10-3 Academic exchange and collaboration in orthopaedic surgery between Japan and Germany
..... *Toshifumi Ozaki, et al.*, Dept. of Orthop. Surg.,
Science of Functional Recovery and Reconstruction, Faculty of Medicine,
Dentistry, and Pharmaceutical Sciences, Okayama Univ. ...S637
- 3-5-JS10-4 The history and future of Japanese-Korean combined orthopaedic symposium
..... *Noboru Taniguchi*, Dept. of Orthop. Surg.,
Graduate School of Medical and Dental Sciences, Kagoshima Univ. ...S637
- 3-5-JS10-5 The exchange between the Japanese Clinical Orthopaedic Association and the Taiwan Orthopaedic Association *Toshio Hasegawa*, Haségawa Orthop. Clinic ...S638

15 : 00 ~ 16 : 20 Symposium 49 AI

Moderators H. Oka, M. Takao

- 3-5-S49-1 Orthopaedic AI in transition: New waves from beyond medicine
..... *Ryuichi Nakahara, et al.*, Dept. of Musculoskeletal Health Promotion, Faculty of Medicine,
Dentistry and Pharmaceutical Sciences, Okayama Univ. ...S639
- 3-5-S49-2 Development of an AI-assisted system to estimate BMD from X-ray images: Toward a paradigm shift in osteoporosis care *Toru Moro, et al.*, Div. of Science for Joint Reconstruction,
Graduate School of Medicine, The Univ. of Tokyo ...S639
- 3-5-S49-3 Potential applications of large language models in orthopaedic practice: A novel approach to clinical decision support
..... *Satoshi Maki, et al.*, Dept. of Orthop. Surg., Graduate School of Medicine, Chiba Univ. ...S640

- 3-5-S49-4 Development of a medical digital twin: Toward next-generation electronic health records system *Yoshimasa Kawazoe*, Dept. of Biomedical Informatics, Graduate School of Medicine, The Univ. of Tokyo...S640
- 3-5-S49-5 Extraction of spatial information from pathological tissue data and its applications *Shumpei Ishikawa*, Dept. of Preventive Medicine, Graduate School of Medicine, The Univ. of Tokyo...S641

16 : 30 ~ 17 : 30	Free papers 51 ONFH	Moderators S. Kobayashi, Y. Homma
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- 3-5-7 Clinical characteristics and identification of associated factors in steroid-induced multifocal osteonecrosis using proteome analysis *Kosuke Arita, et al.*, Dept. of Orthop. Surg., Faculty of Medicine and Graduate School of Medicine, Hokkaido Univ...S642
- 3-5-8 Analysis of osteogenesis-related gene expression in the reparative zone of osteonecrosis of the femoral head *Yusuke Ayabe, et al.*, Dept. of Orthop. Surg., Clinical Medicine, Graduate School of Medical Sciences, Kyushu Univ...S642
- 3-5-9 Investigating an alternative parameter to necrotic volume for predicting collapse in osteonecrosis of the femoral head *Keiji Otaka, et al.*, Dept. of Orthop./Rheumatology, Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine, Graduate School of Medicine, Nagoya Univ...S643
- 3-5-10 Does necrotic depth predict the time to collapse in osteonecrosis of the femoral head? *Tomoya Nawata, et al.*, Dept. of Orthop. Surg., Clinical Medicine, Graduate School of Medical Sciences, Kyushu Univ...S643
- 3-5-11 Comparison of femoral head survival between JIC Type B1 and B2 in osteonecrosis of the femoral head *Hiroaki Ido, et al.*, Dept. of Orthop./Rheumatology, Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine, Graduate School of Medicine, Nagoya Univ...S644
- 3-5-12 Evaluation of collapse prediction for osteonecrosis of the femoral head using tomosynthesis *Masahiro Numa, et al.*, Dept. of Orthop. Surg., Yamaguchi Univ. Hosp...S644

17 : 30 ~ 18 : 30	Free papers 52 Hip-spine	Moderators S. Nakasone, R. Takada
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- 3-5-13 Hip mobility in THA patients influences the severity of new vertebral fractures and changes in sagittal alignment *Youngwoo Kim, et al.*, Dept. of Orthop. Surg., Kyoto City Hosp...S645
- 3-5-14 Longitudinal effects of spinal alignment after total hip arthroplasty on physical function and patient-reported outcomes *Naofumi Taniguchi, et al.*, Dept. of Orthop. Surg., Graduate School of Medical Science, Univ. of Yamanashi...S645
- 3-5-15 Changes in low back pain and determinants of residual symptoms after total hip arthroplasty *Masanori Fujii, et al.*, Dept. of Orthop. Surg., Saga Univ. Hosp...S646
- 3-5-16 Preoperative hip range of motion and sagittal global alignment impacts patient-report outcomes after total hip arthroplasty *Yuta Matsuki, et al.*, Dept. of Orthop. Surg., Yamaguchi Univ. Graduate School of Medicine...S646
- 3-5-17 Spinopelvic sagittal alignment changes following periacetabular osteotomy for acetabular dysplasia *Shumpei Mukai, et al.*, Dept. of Orthop. Surg., Sera Central Hosp...S647
- 3-5-18 Differences in pelvic tilt and spinal alignment according to age in patients with hip dysplasia *Hiroto Funahashi, et al.*, Dept. of Orthop./Rheumatology, Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine, Graduate School of Medicine, Nagoya Univ...S647

3rd Day May 23 Room 6

8 : 00 ~ 9 : 00 JOA academic encourage award Moderator T. Yoshii

- 3-6-AE-1 PI3K/Akt signalling regulates Scx-lineage tenocytes and Tppp3-lineage tendon sheath synovial cells in neonatal tendon regeneration
 *Atsushi Goto, et al.*, Dept. of Orthop. Surg., Div. of Disease Control,
 Research Field of Medical Sciences, Graduate School of Medicine, Gifu Univ. ...S648
- 3-6-AE-2 DNA demethylating agents suppress preclinical models of synovial sarcoma
 *Nobuhiko Hasegawa, et al.*, Dept. of Orthop., Juntendo Univ. ...S648
- 3-6-AE-3 Open-door cervical laminoplasty using instrumentation of every level versus alternate levels:
 A multicenter, randomized controlled trial *Koji Tamai, et al.*, Dept. of Orthop. Surg.,
 Osaka Metropolitan Univ. Graduate School of Medicine ...S649
- 3-6-AE-4 Acellular, bioresorbable, ultra-purified alginate gel implantation for intervertebral disc
 herniation: Phase 1/2, open-label, nonrandomized clinical trials
 *Katsuhisa Yamada, et al.*, Dept. of Orthop. Surg.,
 Faculty of Medicine and Graduate School of Medicine, Hokkaido Univ. ...S649

9 : 15 ~ 10 : 15 Free papers 53 Ankle Moderators T. Matsumoto, Y. Yasui

- 3-6-1 Long-term outcomes of ankle arthroplasty with artificial talus (CTAA)
 *Hiroyuki Mitsui, et al.*, Dept. of Orthop. Surg., St. Marianna Univ. School of Medicine ...S650
- 3-6-2 Long-term outcomes of low tibial osteotomy for ankle osteoarthritis
 *Tomoki Koyama, et al.*, Dept. of Orthop. Surg., Sapporo Medical Univ. ...S650
- 3-6-3 Six-year outcomes of the trabecular metal ankle at a high-volume center: Analysis of postoperative
 complications and implant survivorship
 *Koichiro Yano, et al.*, Dept. of Orthop. Surg., Tokyo Women's Medical Univ. ...S651
- 3-6-4 AI-based 3D evaluation of lower-leg muscle volume in varus ankle osteoarthritis and its association
 with SAFE-Q scores *Norihiro Tsujimoto, et al.*, Dept. of Orthop. Surg., Nara Medical Univ. ...S651
- 3-6-5 Evaluation of rotational instability in patient with ankle osteoarthritis using 4DCT
 *Kanu Shimokawa, et al.*, Dept. of Orthop. Surg., Kanazawa Univ. Hosp. ...S652
- 3-6-6 Kinematic analysis of lateral approach total ankle arthroplasty: Multicenter study using
 3D-2D registration *Hiroyuki Seki, et al.*, Dept. of Orthop. Surg., Tachikawa Hosp. ...S652

10 : 30 ~ 11 : 30 Free papers 54 Foot Moderators T. Ishii, M. Kubota

- 3-6-7 There is a tipping point in the correlation between the hallux valgus angle and the first and second
 metatarsal angles
 *Akiko Nagai, et al.*, Dept. of Orthop. Surg., The Jikei Univ. School of Medicine ...S653
- 3-6-8 Two-year hallux valgus angle after osteotomy can be predicted using preoperative MA and 3-month
 M1M2 angles *Kosuke Kunitomi, et al.*, Dept. of Orthop. Surg.,
 Science of Functional Recovery and Reconstruction, Faculty of Medicine,
 Dentistry, and Pharmaceutical Sciences, Okayama Univ. ...S653
- 3-6-9 Risk factors of second toe varus and valgus deformities associated with hallux valgus
 *Tetsuro Kokubo, et al.*, Dept. of Orthop. Surg., Saitama City Hosp. ...S654
- 3-6-10 Assessing the utility of the checkrein procedure for subluxation or dislocation of the second
 metatarsophalangeal joint with severe hallux valgus
 *Masatoshi Takashima, et al.*, Dept. of Orthop. Surg.,
 Rakusai-Shimizu Hosp./Dept. of Orthop. Surg., Osaka Medical and Pharmaceutical Univ. ...S654
- 3-6-11 Scarf osteotomy with intra-articular stepwise lateral release for hallux valgus: Results with a
 minimum 2-year follow-up *Takumi Matsumoto, et al.*, Dept. of Orthop., Jichi Medical Univ. ...S655

3-6-12 Factors associated with volume changes of abductor hallucis muscle following hallux valgus surgery
 *Song Ho Chang, et al.*, Dept. of Orthop. Surg., JCHO Tokyo Shinjuku Medical Center...S655

12 : 00 ~ 13 : 10 Luncheon seminar 29 Moderator Y. Mochida

3-6-LS29 The role of JAK inhibitors in rheumatoid arthritis treatment strategies:
 Clinical utility and appropriate use of upadacitinib
 *Nobunori Takahashi*, Dept. of Orthop. Surg., Aichi Medical Univ...S656

**13 : 25 ~ 14 : 45 Symposium 50 Moderators H. Niki, M. Takagi
 Timing of surgery in rheumatoid arthritis in the era of controlled disease activity**

3-6-S50-1 Timing of surgical treatment for rheumatoid shoulder and key considerations during the
 perioperative period *Hiroyasu Ikegami, et al.*, Dept. of Orthop. Surg., Toho Univ. (Ohashi)...S657
 3-6-S50-2 Surgical management of elbow disorders in rheumatoid arthritis
 *Takuji Iwamoto, et al.*, Dept. of Orthop. Surg., Keio Univ...S657
 3-6-S50-3 Deformity of the hand *Hajime Ishikawa*, Dept. of Rheumatol., Niigata Rheumatic Center...S658
 3-6-S50-4 Surgical strategy for rheumatoid ankle arthritis: Indications for standard TAA and
 combined TAA *Akira Taniguchi, et al.*, Dept. of Orthop. Surg., Nara Medical Univ...S658
 3-6-S50-5 Treatment strategies for forefoot deformities caused by rheumatoid arthritis
 *Hiroyuki Mitsui, et al.*, Dept. of Orthop. Surg., St. Marianna Univ. School of Medicine...S659

**15 : 00 ~ 16 : 20 Symposium 51 Moderators H. Ishikawa, Y. Kadono
 Total management of rheumatoid arthritis: Future directions bridging the past 100 years**

3-6-S51-1 History of advances in rheumatoid arthritis treatments *Yuko Kaneko*, Div. of Rheumatology,
 Dept. of Internal Medicine, Keio Univ. School of Medicine...S660
 3-6-S51-2 Historical changes and future direction of surgical treatment for RA
 *Keiichiro Nishida*, Locomotive Pain Center,
 Faculty of Medical Development Field, Okayama Univ...S660
 3-6-S51-3 The rehabilitation therapy for patients with rheumatoid arthritis, road to the era of a
 100-year lifespan *Yuya Takakubo, et al.*, Dept. of Rehabilitation, Yamagata Univ...S661
 3-6-S51-4 Abnormal bone metabolism and its management in rheumatoid arthritis: Essential knowledge
 for orthopaedic doctors *Kosuke Ebina, et al.*, Dept. of Orthop. Surg.,
 Graduate School of Medicine, The Univ. of Osaka...S661
 3-6-S51-5 Management of infections in rheumatoid arthritis: The role of orthopaedic surgeons
 *Kensuke Koyama*, Dept. of Rheumatology, Nirasaki City Hosp...S662
 3-6-S51-6 Rheumatoid arthritis patient support across life stages
 *Toshihiro Matsui*, Dept. of Rheumatology Research,
 Clinical Research Center for Allergy and Rheumatology, Sagamihara National Hosp...S662

**16 : 30 ~ 17 : 30 Free papers 55 Moderators Y. Mochida, Y. Takakubo
 RA 3: Treatment/miscellaneous**

3-6-13 Counterfactual-based personalized treatment proposals for rheumatoid arthritis
 *Kosuke Kita, et al.*, Dept. of Orthop. Surg., Graduate School of Medicine, The Univ. of Osaka...S663
 3-6-14 Prevalence and clinical features of clonal hematopoiesis in patients with rheumatoid arthritis:
 An analysis using next-generation sequencing
 *Yuma Saito, et al.*, Dept. of Orthop. Surg., Nagoya Univ. Hosp...S663
 3-6-15 Treatment response patterns to JAK inhibitors in rheumatoid arthritis: An analysis using
 group-based trajectory modeling *Kenya Terabe, et al.*, Dept. of Orthop./Rheumatology,
 Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine,
 Graduate School of Medicine, Nagoya Univ...S664

- 3-6-16 Factors associated with poor PROMs in rheumatoid arthritis patients with normal CRP/ESR and no swollen joints *Yusuke Sugimura, et al.*, Dept. of Orthop. Surg., Akita Rosai Hosp. ...S664
- 3-6-17 Effectiveness of JAK inhibitors in elderly-onset rheumatoid arthritis: Comparison with young-onset RA and trajectory analysis *Kenya Terabe, et al.*, Dept. of Orthop./Rheumatology, Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine, Graduate School of Medicine, Nagoya Univ. ...S665
- 3-6-18 The b/tsDMARDs improve not only muscle mass but also muscle quality in RA patients from multicenter prospective observational PRESENT study *Masahiro Tada, et al.*, Dept. of Orthop. Surg., Osaka City General Hosp. ...S665

17 : 30 ~ 18 : 30	Invited lecture 18 (English)	Moderator Y. Kadono
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- 3-6-IL18-1 Prevention of rheumatoid arthritis and new methods to treat resistant disease *Georg Schett*, FAU, Erlangen-Nürnberg, Germany ...S666
- 3-6-IL18-2 Precision medicine of rheumatoid arthritis *Keishi Fujio*, Dept. Allergy and Rheumatology, Graduate School of Medicine, The Univ. of Tokyo ...S666

3rd Day May 23 Room 7

8 : 00 ~ 9 : 00	Free papers 56 AI: Lower limb	Moderators K. Oka, T. Yasui
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- 3-7-1 Seeing the unseen: Deep learning for diagnosis of talocalcaneal coalition *Yusuke Nakazawa, et al.*, Dept. of Orthop. Surg., Graduate School of Medical Sciences, Kanazawa Univ. ...S667
- 3-7-2 Development of artificial intelligence for automated bone length measurement on foot radiographs *Ryutaro Takeda, et al.*, Dept. of Orthop. Surg., The Univ. of Tokyo Hosp., The Univ. of Tokyo ...S667
- 3-7-3 A novel dynamic assessment of patellofemoral joint kinematics in total knee arthroplasty using robotics *Daisuke Hamada, et al.*, Dept. of Orthop., Takamatsu Red Cross Hosp. ...S668
- 3-7-4 AI-based assessment of severity and feature analysis in early knee osteoarthritis *Kei Yokogawa, et al.*, Dept. of Orthop. Surg., Tottori Univ. ...S668
- 3-7-5 Development of a machine learning model to predict functional outcomes in proximal femoral fractures: Toward application to individualized rehabilitation interventions *Takehiro Kaneoka, et al.*, Dept. of Orthop. Surg., JCHO Tokuyama Central Hosp. ...S669
- 3-7-6 The utility of the AI system for predicting falls in cases bipolar or total hip arthroplasty for femoral neck fractures *Yoshiaki Nakajima, et al.*, Dept. of Orthop. Surg., Iwata City Hosp. ...S669

9 : 15 ~ 10 : 15	Free papers 57 AI: Miscellaneous	Moderators Y. Hagiwara, M. Yoshida
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- 3-7-7 Pitching motion analysis combining pose estimation AI and machine learning in throwing elbow screening *Atsuyuki Inui, et al.*, Dept. of Orthop. Surg., Kobe Univ. Hosp. ...S670
- 3-7-8 An AI model for plain X-ray segmentation fine-tuned from a foundation model maintains high performance on external data *Shuya Takahashi, et al.*, Dept. of Orthop. Surg., Teikyo Univ. ...S670
- 3-7-9 Electronic medical record-integrated generative AI for workflow efficiency in orthopaedic practice under work style reform *Shinya Kawahara, et al.*, Dept. of Orthop. Surg., Clinical Medicine, Graduate School of Medical Sciences, Kyushu Univ. ...S671
- 3-7-10 Identification of novel biomarkers for predicting functional recovery in spinal cord injury patients *Gentaro Ono, et al.*, Dept. of Orthop. Surg., Spinal Injuries Center ...S671
- 3-7-11 Three-dimensional postoperative evaluation and clinical outcomes of reverse shoulder arthroplasty with and without navigation system *Tomoya Manaka, et al.*, Dept. of Orthop. Surg., Osaka Metropolitan Univ. Graduate School of Medicine ...S672

- 3-7-12 Building a screening system for vertebral fracture diagnosis using X-ray images taken with a smartphone and artificial intelligence *Yuji Kado, et al.*, Dept. of Orthop. Surg., Graduate School of Biomedical and Health Sciences, Hiroshima Univ. ...S672

10 : 30 ~ 11 : 30 Free papers 58

Moderators N. Kasahara, T. Uematsu

Perioperative complication: Lower limb

- 3-7-13 Impact of Charlson comorbidity index and pre-injury activity level on postoperative medical complications following hemiarthroplasty for displaced femoral neck fracture *Shuichi Miyamoto, et al.*, Dept. of Orthop. Surg., Tokyo Medical Univ. Ibaraki Medical Center ...S673
- 3-7-14 BMI and perioperative risk in elderly patients with proximal femoral fractures based on DPC database analysis *Ryuichi Kanabuchi, et al.*, Dept. of Orthop. Surg., Tohoku Univ. Graduate School of Medicine ...S673
- 3-7-15 Changes in the risk of postoperative complications before and after surgery in patients undergoing THA based on nutritional status *Katsuhiko Maezawa, et al.*, Dept. of Orthop. Surg., Juntendo Univ. Urayasu Hosp. ...S674
- 3-7-16 All-cause mortality and cardiovascular outcomes in knee osteoarthritis patients aged eighty years and older: Total knee replacement vs conservative treatment *Yuki Morishima, et al.*, Dept. of Medical Resident, Omi Medical Center ...S674
- 3-7-17 A comparison study of preoperative autologous donation for hip replacement surgery *Ryo Mitsutake, et al.*, Dept. of Orthop. Surg., Asahikawa Medical Univ. ...S675
- 3-7-18 Impact of dyslipidemia and lipid lowering agent on hidden blood loss in THA *Yukimi Kumahara, et al.*, Dept. of Orthop. Surg., Shonan Kamakura Joint Reconstruction Center ...S675

12 : 00 ~ 13 : 10 Luncheon seminar 30

Moderator T. Tomita

- 3-7-LS30 Clinical outcomes, mechanisms of action, and development of cell therapy for osteoarthritis *Taku Saito*, Orthop. Surg., Sensory and Motor System Medicine, Surgical Sciences, Graduate School of Medicine, The Univ. of Tokyo ...S676

13 : 25 ~ 14 : 25 Free papers 59

Moderators S. Ohashi, N. Kanda

Osteoporosis: Fracture treatment

- 3-7-19 Epidemiology and management patterns of fragility fractures in the elderly aged 75 years and older in Japan *Shuhei Kawaguchi, et al.*, Dept. of Orthop. Surg., Graduate School of Biomedical and Health Sciences, Hiroshima Univ. ...S677
- 3-7-20 Validation of early surgery within 48 hours for proximal femoral fractures in the very elderly: A multicenter prospective cohort study *Hotaka Ishizu, et al.*, Dept. of Orthop. Surg., Hokkaido Univ. Hosp. ...S677
- 3-7-21 Effect of pre-injury osteoporosis medication on the fracture pattern of femoral trochanteric fractures: A 3D-CT analysis using the Nakano classification *Masashi Shimamura, et al.*, Dept. of Orthop. Surg., Shikoku Medical Center for Children and Adults ...S678
- 3-7-22 Risk factors for mortality in patients with vertebral body fractures treated conservatively: A community hospital cohort study *Hirota Ogi, et al.*, Dept. of Orthop. Surg., Hamamatsu Univ. School of Medicine ...S678
- 3-7-23 Diagnosis rate of osteoporosis and treatment costs in patients with distal radius fractures *Yoshio Kaji, et al.*, Kinashi Obayashi Hosp., Hand Surg. Center ...S679
- 3-7-24 Evaluation of intravertebral bony defect (cavity) within 7 days of onset in fresh osteoporotic vertebral fractures (OVFs) *Kazushi Otsuka*, Dept. of Orthop. Surg., Hayashi Hosp. ...S679

14 : 40 ~ 15 : 40 Free papers 60

Moderators Y. Ito, A. Yamamoto

Osteoporosis: Fracture risk/prevention

- 3-7-25 Vertebral-spinal cord ratio (VSR): A novel MRI-based index for assessing vertebral bone strength and fracture risk *Shuhei Kawaguchi, et al.*, Dept. of Orthop. Surg.,
Graduate School of Biomedical and Health Sciences, Hiroshima Univ. ...S680
- 3-7-26 Assessment of treatment-induced bone loss using lumbar spine Hounsfield units in osteosarcoma and vertebral fragility fractures
..... *Hiroataka Kurata, et al.*, Dept. of Orthop. Surg., Tohoku Univ. Graduate School of Medicine ...S680
- 3-7-27 Investigation of possible sarcopenia, osteoporosis, osteosarcopenia, and malnutrition in patients undergoing surgery for distal radius fractures
..... *Takafumi Hosokawa, et al.*, Kiryu Orthop. Surg. Hosp. ...S681
- 3-7-28 Trunk muscle mass and lower limb muscle function in relation to low back pain and nutritional status in osteoporosis patients *Naoya Shibata, et al.*, Dept. of Orthop. Surg., Kitasato Univ. ...S681
- 3-7-29 Stratification of bone strength decline using the bone resilience index: Association with nutritional indicators and muscle mass in older adults
..... *Takuji Matsumoto, et al.*, Dept. of Orthop. Surg., Nokami Kosei General Hosp. ...S682
- 3-7-30 Fracture risk associated with intravenous methylprednisolone pulse therapy in cancer patients
..... *Satoshi Kubota, et al.*, Dept. of Orthop. Surg., NHO Kyushu Cancer Center ...S682

15 : 55 ~ 17 : 15 Symposium 52

Moderators S. Tanaka, S. Ohtori

Healthcare policy and work style reform

- 3-7-S52-1 Reform of work styles in university hospitals: Balancing education, research, and management while facing triple challenges
..... *Seiji Ohtori*, Dept. of Orthop. Surg., Graduate School of Medicine, Chiba Univ. ...S683
- 3-7-S52-2 New regional health system vision
..... *Shinya Matsuda*, Dept. of Nursing, Fukuoka International Univ. of Health and Welfare ...S683
- 3-7-S52-3 Work style reform for physicians in community healthcare: Current initiatives and challenges
..... *Katsumi Nakata*, Ministry of Health, Labour and Welfare ...S684
- 3-7-S52-4 Regarding the future structure of regional healthcare
..... *Hanako Jimi*, Member of the House of Councillor ...S684

17 : 30 ~ 18 : 30 Free papers 61 Miscellaneous

Moderators Y. Nagaya, T. Hirano

- 3-7-31 Level-specific analysis of spinal surgeries using the seven-color grading system of transcranial electrical stimulation motor-evoked potential monitoring
..... *Yasushi Murakami, et al.*, Dept. of Orthop. Surg.,
Hiroshima City North Medical Center Asa Citizens Hosp. ...S685
- 3-7-32 Postoperative outcomes of nerve transfer for obstetric brachial plexus palsy
..... *Hiroataka Sugiura, et al.*, Div. of Human Enhancement & Hand Surg.,
Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine,
Graduate School of Medicine, Nagoya Univ. ...S685
- 3-7-33 Femoral lateral bowing deformity in normal knee
..... *Shinya Ishizuka, et al.*, Dept. of Orthop. Surg., Nagoya Univ. Hosp. ...S686
- 3-7-34 Trends in surgical procedures for tendon injuries in Japan: An analysis of national database open data (FY2015-FY2023)
..... *Taketoshi Oda, et al.*, Dept. of Orthop. Surg., Tokyo Women's Medical Univ. ...S686
- 3-7-35 The impact of co-management in hip fractures on orthopaedic care
..... *Chieko Kadoma, et al.*, Dept. of Orthop. Surg., Itabashi Chuo General Hosp. ...S687

- 3-7-36 Male-female comparisons on working and life environment of orthopaedic surgeons:
A feasibility study *Yukari Watanabe, et al.*, Dept. of Orthop. Surg., Toranomon Hosp. ...S687

3rd Day May 23 Room 8

8 : 00 ~ 9 : 00 Invited lecture 19 (English) Moderator K. Kaneoka

- 3-8-IL19-1 The latest advances in female athlete injury prevention, performance optimization, and return to sport *Emily A. Kraus*, Dept. of Orthop. Surg., Stanford Univ., Stanford, CA, USA ...S688
- 3-8-IL19-2 Management of low back pain in athletes: From adolescent to professional players *Kinshi Kato*, Dept. of Sports Medicine, Fukushima Medical Univ. ...S688

9 : 15 ~ 10 : 15 Invited lecture 20 (English) Moderator Y. Oshima

- 3-8-IL20-1 Value in orthopaedic surgery: Decreasing cost does not mean decreasing care *Leo T. Kroonen*, Dept. of Orthop. Surg., Kaiser Permanente/Southern California Permanente Medical Group, San Diego, CA, USA ...S689
- 3-8-IL20-2 The impact of the JOA-AOA exchange traveling fellowship on the outlook of one Japanese young orthopaedic surgeon *Sachiyuki Tsukada*, Dept. of Orthop. Surg., Hokuuikai Kinen Hosp. ...S689

10 : 30 ~ 11 : 30 Free papers 62 Sports: Upper limb 2 Moderators T. Matsuura, N. Yamamoto

- 3-8-1 Evaluation of repair tissue using ultrapurified alginate gel implantation for osteochondral lesion *Daisuke Momma, et al.*, Center for Sports Medicine, Hokkaido Univ. Hosp. ...S690
- 3-8-2 Mid-term outcomes of treatment for osteochondritis dissecans of humeral capitellum using ultrapurified alginate gel implantation *Daisuke Momma, et al.*, Center for Sports Medicine, Hokkaido Univ. Hosp. ...S690
- 3-8-3 Optimal fixation method of suture tape in ligament repair for ulnar collateral ligament injury *Masahito Yoshida, et al.*, Dept. of Musculoskeletal Sports Medicine, Research and Innovation, Nagoya City Univ., Graduate School of Medical Sciences ...S691
- 3-8-4 Is cross-sectional size of costal osteochondral graft predictable by sonography? *Tetsuya Takenaga, et al.*, Dept. of Orthop. Surg., Nagoya City Univ., Graduate School of Medical Sciences ...S691
- 3-8-5 Association between capitellar osteochondritis dissecans and hand size *Ryosuke Sugimoto, et al.*, Dept. of Orthop./Rheumatology, Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine, Graduate School of Medicine, Nagoya Univ. ...S692
- 3-8-6 Arthroscopic treatment results for scaphoid fractures and nonunions caused by sports injuries *Takeshi Sakai, et al.*, Dept. of Orthop. Surg., Showa Medical Univ. Northern Yokohama Hosp. ...S692

12 : 00 ~ 13 : 10 Luncheon seminar 31 Moderator M. Takahata

- 3-8-LS31 The significance of "building bone" in osteoporosis treatment: New trends emerge with guideline revisions and biosimilars *Kosuke Ebina, et al.*, Dept. of Orthop. Surg., Graduate School of Medicine, The Univ. of Osaka ...S693

13 : 25 ~ 14 : 25 Free papers 63 Rotator cuff injury 3 Moderators K. Kikugawa, Y. Uchiyama

- 3-8-7 The relationship between the success of rotator cuff repair and humeral bone mineral density *Norio Ishigaki, et al.*, Dept. of Orthop. Surg., Shinonoi General Hosp. ...S694
- 3-8-8 Long-term outcomes of rotator cuff repair in young-old *Yuya Kotagiri, et al.*, Dept. of Orthop. Surg., Shinonoi General Hosp. ...S694

- 3-8-9 Feature importance assessment and selection of predictors of retear using machine learning algorithms in patients with arthroscopic rotator cuff repair
 *Takuya Tokunaga, et al.*, Dept. of Orthop. Surg., Faculty of Life Sciences, Kumamoto Univ. ...S695
- 3-8-10 Influence of anxiety and depression on early postoperative pain following arthroscopic rotator cuff repair *Tatsuya Fujii, et al.*, Dept. of Orthop. Surg., Laketown Orthop. Hosp. ...S695
- 3-8-11 Clinical outcomes and re-tear factors in rotational infraspinatus muscle transfer
 *Kanji Furuya, et al.*, Showa Medical Univ. Research Institute for Sport and Exercise Sciences ...S696
- 3-8-12 Radial MRI-based three-dimensional quantitative assessment of tear size and humeral head translation in rotator cuff tears
 *Maika Yamamoto, et al.*, Dept. of Orthop. Surg., Sapporo Medical Univ. ...S696

14 : 40 ~ 15 : 40	Invited lecture 21 (English)	Moderator H. Takayanagi
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- 3-8-IL21-1 Can we treat osteoporosis, obesity and neurodegeneration with a single FSH-blocking drug?
 *Mone Zaidi*, Institute for Translational Medicine and Pharmacology,
 Mount Sinai Sch. Med., New York, NY, USA ...S697
- 3-8-IL21-2 Bridging the next century: Prevention and treatment of osteoporosis in Japan
 *Taro Mawatari*, Dept. of Orthop. Surg., KKR Hamanomachi Hosp. ...S697

15 : 55 ~ 17 : 15	Symposium 53	Moderators J. Toguchida, H. Asahara
Development of musculoskeletal transplantation and regenerative medicine using pluripotent stem cells		

- 3-8-S53-1 Muse cell-based regenerative therapy for spinal cord injury: Targeting post-injury systemic inflammation *Gentaro Kumagai, et al.*, Dept. of Orthop. Surg.,
 Hirosaki Univ. Graduate School of Medicine ...S698
- 3-8-S53-2 Preclinical research toward clinical implementation of FD-iMPs for musculoskeletal applications
 *Yasuhiro Shiga, et al.*, Dept. of Orthop. Surg., Graduate School of Medicine, Chiba Univ. ...S698
- 3-8-S53-3 Development of cartilage regeneration therapy using iPS cell-derived cartilage
 *Noriyuki Tsumaki*, Dept. of Tissue Biochemistry, The Univ. of Osaka ...S699
- 3-8-S53-4 Development of meniscus regenerative therapy using synovial mesenchymal stem cells
 *Ichiro Sekiya, et al.*, Center for Stem Cell and Regenerative Medicine,
 Institute of Science Tokyo ...S699
- 3-8-S53-5 Development of regenerative medicine for tendons and ligaments using iPS cells
 *Hiroshi Asahara*, Dept. of Systems BioMedicine, Institute of Science Tokyo ...S700

17 : 30 ~ 18 : 30	Instructional lecture 34	Moderator S. Fujiwara
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- 3-8-EL34 History and future of paediatric rehabilitation in Japan: Focusing on physical disabilities
 *Keisuke Kosaki*, Dept. of Orthop. Surg.,
 National Rehabilitation Center for Children with Disabilities ...S701

3rd Day May 23 Room 9

8 : 00 ~ 9 : 00	Invited lecture 22 (English)	Moderator K. Uehara
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- 3-9-IL22-1 Purified exosome product for rotator cuff repair and regeneration
 *Chunfeng Zhao*, Dept. of Orthop. Surg., Mayo Clinic, Rochester, MN, USA ...S702
- 3-9-IL22-2 Cellular senescence: A key regulator of inflammation and tissue regeneration
 *Takako Chikenji, et al.*, Div. of Rehabilitation Science,
 Dept. of Health Sciences, Faculty of Health Sciences, Hokkaido Univ. ...S702

9 : 15 ~ 10 : 15 Invited lecture 23 (English) Moderator K. Yamada

- 3-9-IL23-1 What happened at the International Consensus Meeting 2025: Synopsis of accomplishments
 *Javad Parvizi, et al.*, Dept. of Orthop. Surg., Acibadem Univ., Ardmore, PA, USA...S703
- 3-9-IL23-2 What we learned from the International Consensus Meeting 2025:
 Knowledge and the valuable asset of experience
 *Hyonmin Choe, et al.*, Musculoskeletal Science,
 Yokohama City Univ. Graduate School of Medicine...S703

10 : 30 ~ 11 : 30 Free papers (English) 64 Knee and hip joints Moderators K. Ryu, Y. Kimura

- 3-9-1 Impact of coronal plane alignment of the knee (CPAK) classification on 3-dimensional kinematics
 during gait after total knee arthroplasty *Takahiro Inoue, et al.*, Dept. of Orthop. Surg.,
 Clinical Medicine, Graduate School of Medical Sciences, Kyushu Univ...S704
- 3-9-2 Impact of preoperative pain sensitivity on functional and mechanical alignment total
 knee arthroplasty
 *Kohei Kawaguchi, et al.*, Dept. of Orthop. Surg., North Shore Hosp., Takapuna, New Zealand...S704
- 3-9-3 Factors affecting cementless femoral stem alignment in DAA hip arthroplasties:
 A review of 100 cases *Gloria Yan Ting Lam*, Dept. of Orthop. and Traumatology,
 Alice Ho Miu Ling Nethersole Hosp., Tai Po, NT, Hong Kong/
 Dept. of Orthop. and Traumatology, The Chinese Univ. of Hong Kong,
 NT, Hong Kong...S705
- 3-9-4 Optimizing hamstring tendon graft harvesting to minimize sartorial branch of saphenous nerve
 injury: Cadaveric study *Khananut Jaruwannechai, et al.*, Dept. of Orthop. Surg.,
 Warin Chamrab Hosp., Ubon Ratchathani, Thailand...S705
- 3-9-5 Meniscal allograft transplantation concomitant with cartilage repair for symptomatic lateral
 meniscus: Deficient knees with over two years of follow-up
 *Yuji Uchio, et al.*, Dept. of Orthop. Surg., Shimane Univ...S706
- 3-9-6 Acetabular retroversion following rotational acetabular osteotomy is affected by the ischial
 osteotomy angle *Kazuki Yamada, et al.*, Dept. of Orthop. Surg., Okayama Univ. Hosp...S706

12 : 00 ~ 13 : 10 Luncheon seminar 32 Moderator A. Okawa

- 3-9-LS32-1 Performance evaluation theory and standardization of flooring for fall fracture risk reduction
 *Yasumi Ito*, Faculty of Engineering, Univ. of Yamanashi...S707
- 3-9-LS32-2 Falling accidents in nursing care and rehabilitation facilities and the usefulness of safety floors
 *Kouji Kurusu*, Azelee Group...S707

13 : 25 ~ 14 : 25 Free papers (English) 65 Spine Moderators N. Wakao, A. Suzuki

- 3-9-7 Comparative study of surgical outcomes between young and middle-aged patients with adult
 idiopathic scoliosis *Yasushi Iijima, et al.*, Dept. of Orthop. Surg., Seirei Sakura Citizen Hosp...S708
- 3-9-8 Risk factors for allogeneic red blood transfusion in pediatric spinal deformity surgery
 *Yasushi Iijima, et al.*, Dept. of Orthop. Surg., Seirei Sakura Citizen Hosp...S708
- 3-9-9 Preoperative leg muscle quality association functional recovery after adult spinal
 deformity surgery *Masato Tanaka, et al.*, Dept. of Orthop. Surg., Okayama Rosai Hosp...S709
- 3-9-10 Incidence of and factors significantly associated with syndrome of inappropriate antidiuretic
 hormone (SIADH) among traumatic cervical spinal cord injury patients
 *Cholavech Chavasiri, et al.*, Dept. of Orthop. Surg.,
 Faculty of Medicine, Siriraj Hosp., Mahidol Univ., Bangkok, Thailand...S709

- 3-9-11 Preliminary application of 3D-printed PEKK artificial vertebral body in bone defect reconstruction after en bloc resection of spinal tumors
 *Lei Shi, et al.*, Dept. of Orthop. Surg., Xijing Hosp., Xi'an, China...S710
- 3-9-12 Expansion duraplasty in spinal compartment syndrome in traumatic spinal cord injury
 *Shahzaib Riaz Baloch, et al.*, Dept. of Orthop. & Spine Surg., Dr. Zia Hosp., Karachi, Pakistan...S710

14 : 40 ~ 15 : 40	Invited lecture 24 (English)	Moderator S. Demura
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- 3-9-IL24-1 Form follows function
 *Ho-Joong Kim*, Dept. of Orthop. Surg., Seoul National Univ. Bundang Hosp., Seoul National Univ. College of Medicine, Seongnam, Korea...S711
- 3-9-IL24-2 History and current status of adult spinal deformity surgery
 *Gen Inoue*, Dept. of Orthop. Surg., Kitasato Univ...S711

15 : 55 ~ 17 : 15	JOA Directors' proposed symposium 11 Gastroenterological surgery and musculoskeletal disorders	Moderators T. Ohe, A. Saiura
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- 3-9-JS11-1 What gastroenterological surgeons need to know about locomotive syndrome: Its concept, evaluation, and countermeasures *Hideaki Ishibashi*, Dept. of Orthop. Surg., Ina Hosp...S712
- 3-9-JS11-2 Nutritional assessment and sarcopenia in long-term disease-free survivors after pancreatectomy for pancreatic diseases
 *Hiroshi Imamura, et al.*, Dept. of Hepatobiliary-Pancreatic Surg., Juntendo Univ...S712
- 3-9-JS11-3 Effect of rehabilitation on esophageal cancer patients undergoing preoperative adjuvant chemotherapy
 *Kazuhiro Noma, et al.*, Dept. of Gastroenterological Surg., Okayama Univ...S713
- 3-9-JS11-4 Rehabilitation treatment for the patient undergoing gastroenterological surgery
 *Yoshitada Sakai, et al.*, Div. of Rehabilitation Medicine, Kobe Univ. Graduate School of Medicine...S713
- 3-9-JS11-5 The association between metabolic and locomotive syndromes: Implications for gastrointestinal surgeons
 *Keiko Yamada*, Saitama Prefecture Univ./Dept. of Rehabilitation, Univ. of Tokyo Hosp...S714

17 : 30 ~ 18 : 30	Invited lecture 25 (English)	Moderator M. Yagi
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- 3-9-IL25-1 Cervical deformity: Classification and treatment
 *Han Jo Kim*, Dept. of Orthop. Surg., Hosp. Special Surg., New York, NY, USA...S715
- 3-9-IL25-2 The challenge in treating complex spine deformity in Japan
 *Hiroyuki Nakarai*, Dept. of Orthop. Surg., The Univ. of Tokyo Hosp., The Univ. of Tokyo...S715

3rd Day May 23 Room 10

8 : 00 ~ 9 : 00	Instructional lecture 35	Moderator T. Yamasaki
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- 3-10-EL35 Hip arthroscopy: Indication, surgical procedure, and pitfall
 *Kensuke Fukushima, et al.*, Dept. of Orthop. Surg., Kitasato Univ...S716

9 : 15 ~ 10 : 15	Instructional lecture 36	Moderator T. Jinno
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- 3-10-EL36 Difficult primary THA: Past, present, and future *Tamon Kabata*, Dept. of Orthop. Surg., Graduate School of Medical Sciences, Kanazawa Univ...S716

10 : 30 ~ 11 : 30 Free papers 66 Spine: Complication 1 Moderators H. Terai, G. Inoue

- 3-10-1 Postoperative mortality and satisfaction in elderly spinal surgery: Comparing patients aged 80+ and 65-79 years *Atsuyuki Kawabata, et al.*, Dept. of Orthop. Surg., Kudanzaka Hosp. ...S717
- 3-10-2 Risk factors for low back pain in residual adolescent idiopathic scoliosis *Masaya Mizutani, et al.*, Dept. of Orthop. Surg., Chiba Univ. Hosp. ...S717
- 3-10-3 Regional epidemiology and perioperative outcomes of anterior and posterior cervical fusion: Nationwide database study from the Japanese Spinal Instrumentation Society *Shunsuke Katsumi, et al.*, Database Committee of the Japanese Spinal Instrumentation Society ...S718
- 3-10-4 Minimally invasive endoscopic ACDF: Initial experience and comparative analysis with the conventional approach ... *Yuta Yamamoto, et al.*, Dept. of Orthop. Surg., Wakayama Medical Univ. ...S718
- 3-10-5 Association between complications and spinal alignment in growing rod surgery *Masataka Ueda, et al.*, Dept. of Orthop. Surg., Science of Functional Recovery and Reconstruction, Faculty of Medicine, Dentistry, and Pharmaceutical Sciences, Okayama Univ. ...S719
- 3-10-6 Association between biological age (PhenoAge) and perioperative complications in patients undergoing surgery for cervical degenerative disease *Keitaro Ito, et al.*, Dept. of Orthop. Surg., International Univ. of Health and Welfare ...S719

12 : 00 ~ 13 : 10 Luncheon seminar 33 Moderator K. Okazaki

- 3-10-LS33-1 The usefulness of Augmented Reality Knee systems in total knee arthroplasty *Kenji Fukunaga*, Dept. of Orthop. Surg., Osaka Rosai Hosp. ...S720
- 3-10-LS33-2 Utility of Augmented Reality knee portable navigation system in hybrid personalized alignment total knee arthroplasty *Masahiro Ishikawa*, Dept. of Orthop. Surg., Fukui Red Cross Hosp. ...S720

13 : 25 ~ 14 : 25 Free papers 67 Spine: Congenital Moderators T. Kotani, Y. Taniguchi

- 3-10-7 Evaluation of MRI "CT-like" imaging for pedicle diameter measurement in adolescent idiopathic scoliosis *Shunsuke Katsumi, et al.*, Dept. of Orthop. Surg., The Jikei Univ. School of Medicine ...S721
- 3-10-8 Association between genetic predisposition and morphological characteristics in adolescent idiopathic scoliosis *Kazuki Takeda, et al.*, Dept. of Orthop. Surg., Keio Univ. ...S721
- 3-10-9 Clinical significance of congenital spinal anomalies: Lumbar disorders associated with lumbosacral transitional vertebra and spina bifida occulta *Masatoshi Morimoto, et al.*, Dept. of Orthop., Institute of Biomedical Sciences, Tokushima Univ. Graduate School ...S722
- 3-10-10 Lumbosacral transitional vertebrae reveal the risk of nerve root anomalies *Hiroki Tawaratsumida, et al.*, Dept. of Orthop. Surg., Kagoshima Univ. Hosp. ...S722
- 3-10-11 Anterior vertebral overgrowth in adolescent idiopathic scoliosis: Clinical characteristics and its impact on thoracic kyphosis restoration and postoperative outcomes *Yasuhiro Sensui, et al.*, Dept. of Orthop. Surg., Shinshu Univ. ...S723
- 3-10-12 Did school scoliosis screening decrease the number of surgeries?: Comparison between different screening systems *Yoshiki Takeoka, et al.*, Dept. of Orthop. Surg., Kobe Univ. Graduate School of Medicine ...S723

14 : 40 ~ 15 : 40 Instructional lecture 37 Moderator T. Tanaka

- 3-10-EL37 Approaches to orthopaedic surgical site infections: Prevention with bundle care and evidence based treatment strategies *Hyonmin Choe, et al.*, Musculoskeletal Science, Yokohama City Univ. Graduate School of Medicine ...S724

15 : 55 ~ 17 : 15 Symposium 54

Moderators Y. Inaba, M. Saito

Updates on prosthetic joint infection

- 3-10-S54-1 Infection control team (ICT) initiatives for surgical site infections in orthopaedic surgery
..... *Yasushi Nakazawa*, The Jikei Univ. School of Medicine...S725
- 3-10-S54-2 Overview of the 2024 revision of the MRSA treatment guidelines
..... *Koji Yamada, et al.*, Mizonokuchi Orthop....S725
- 3-10-S54-3 Indications and limitations of DAIR in periprosthetic joint infection of total hip arthroplasty
..... *Toshiyuki Tateiwa, et al.*, Dept. of Orthop. Surg., Tokyo Medical Univ....S726
- 3-10-S54-4 Treatment strategy for intractable periprosthetic joint infection using continuous local
antibiotic perfusion (CLAP) *Hyonmin Choe, et al.*, Musculoskeletal Science,
Yokohama City Univ. Graduate School of Medicine...S726
- 3-10-S54-5 Current status of phage therapy and its application in treating periprosthetic joint infections
..... *Takeaki Matsuda, et al.*, Dept. of Traumatology and Critical Care Medicine, Kyorin Univ....S727

17 : 30 ~ 18 : 30 Instructional lecture 38

Moderator M. Ishijima

- 3-10-EL38 Reexamining the pathophysiological relationship between osteoporosis and arthritis and
improving the survival rate of artificial joints
..... *Mitsuru Saito*, Dept. of Orthop. Surg., The Jikei Univ. School of Medicine...S728

3rd Day May 23 Room 11

8 : 00 ~ 9 : 00 Instructional lecture 39

Moderator Y. Taniguchi

- 3-11-EL39 Diagnosis and treatment of pediatric spinal deformities
..... *Haruhisa Yanagida*, Dept. of Orthop. & Spine Surg., Fukuoka Children's Hosp....S728

9 : 15 ~ 10 : 15 Free papers 68

Moderators N. Ogata, M. Osaki

Locomotive syndrome: Related factors

- 3-11-1 Lifestyle-related factors associated with the development of locomotive syndrome in middle-aged
adults: A 7-year longitudinal analysis of health checkup data
... *Satoshi Yamaguchi, et al.*, Graduate School of Global and Transdisciplinary Studies, Chiba Univ....S729
- 3-11-2 Impact of metabolic syndrome on musculoskeletal disorders: An analysis using community health
screening data (Yakumo Study)
..... *Taisuke Seki, et al.*, Dept. of Orthop. Surg., Aichi Medical Univ. Medical Center...S729
- 3-11-3 Effect of regular individual rehabilitation in enhancing motivation and physical function in
locomotive syndrome *Satoshi Aoyagi, et al.*, Dept. of Rehabilitation, Kyoto Kujo Hosp....S730
- 3-11-4 LOCOMO stages: Its utility and the optimal timing for preventive interventions
..... *Yujiro Kagami, et al.*, Dept. of Orthop./Rheumatology,
Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine,
Graduate School of Medicine, Nagoya Univ....S730
- 3-11-5 Preventive factors for maintaining care levels in community-dwelling older adults:
A longitudinal analysis *Naoki Segi, et al.*, Dept. of Orthop./Rheumatology,
Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine,
Graduate School of Medicine, Nagoya Univ....S731
- 3-11-6 Locomotive syndrome and mortality risk in elderly: 11-year community cohort study -
The Yakumo study *Sadayuki Ito, et al.*, Dept. of Orthop./Rheumatology,
Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine,
Graduate School of Medicine, Nagoya Univ....S731

10 : 30 ~ 11 : 30 Free papers 69

Moderators H. Tohyama, N. Fukuda

Locomotive syndrome: Evaluation method

- 3-11-7 Factors associated with childhood locomotive syndrome in adolescent athletes
..... *Minoru Toriyama, et al.*, Sports Medical Center, Hiroshima Univ. Hosp. ...S732
- 3-11-8 Prevalence of low back pain and association with spinal alignment measured by spinal mouse in school-age children KID Locomo Study
..... *Masatoshi Teraguchi, et al.*, Dept. of Orthop. Surg., Wakayama Medical Univ. ...S732
- 3-11-9 Clinical utility of the 10-second grip and release test in sarcopenia evaluation
..... *Masatoshi Teraguchi, et al.*, Dept. of Orthop. Surg., Wakayama Medical Univ. ...S733
- 3-11-10 Evaluation of the utility of phase angle in the diagnosis of rheumatoid sarcopenia
..... *Yuki Saito, et al.*, Dept. of Orthop./Rheumatology,
Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine,
Graduate School of Medicine, Nagoya Univ. ...S733
- 3-11-11 Relationship between falling and locomotive syndrome: A cross-sectional observational study in general population health checkups
..... *Takaaki Nakano, et al.*, Dept. of Orthop. Surg., Hirosaki Univ. Graduate School of Medicine ...S734
- 3-11-12 The effects of locomotive syndrome digital therapeutics provided via a smartphone application: Proof-of-concept single-group trial
..... *Tatsuru Sonobe, et al.*, Dept. of Orthop. Surg., Fukushima Medical Univ. ...S734

12 : 00 ~ 13 : 10 Luncheon seminar 34

Moderator N. Miyakoshi

- 3-11-LS34 The clinical value of robotic assistance in spinal surgery: Significance and future perspectives despite its limitations
..... *Takashi Kaito*, Dept. of Orthop. Surg., Osaka-Rosai Hosp. ...S735

13 : 25 ~ 14 : 25 Free papers 70

Moderators K. Saita, M. Deie

Locomotive syndrome: Surgical treatment

- 3-11-13 Utility of GLFS-25 as a patient-reported outcome measure for older patients with lumbar spinal stenosis: A two-year retrospective cohort study
..... *Kohei Shibata, et al.*, Dept. of Orthop. Surg., Fujita Health Univ. ...S736
- 3-11-14 Potential involvement of family structure in locomotive recovery following surgery in older patients with lumbar spinal stenosis
..... *Koutaro Kageshima, et al.*, Dept. of Orthop. Surg., Fujita Health Univ. ...S736
- 3-11-15 Analysis of factors contributing to improvement in locomotive function after total knee arthroplasty
..... *Takuya Tachibana, et al.*, Dept. of Orthop. Surg., Osaka Saiseikai Nakatsu Hosp. ...S737
- 3-11-16 Determinants of putting on socks ability before and after total hip arthroplasty based on a longitudinal ROM analysis
..... *Yusuke Takaoka, et al.*, Dept. of Orthop. Surg., Graduate School of Medicine, Kyoto Univ. ...S737
- 3-11-17 Evaluation of postoperative outcomes of total knee arthroplasty in patients with cancer locomotive syndrome type 3
..... *Yuma Nishioka, et al.*, Dept. of Orthop.,
Institute of Biomedical Sciences, Tokushima Univ. Graduate School ...S738
- 3-11-18 Timing of weight-bearing following ORIF for Vancouver type B periprosthetic femoral fractures in geriatric patients: A multicenter retrospective cohort study
..... *Kohei Uomi, et al.*, Dept. of Orthop./Rheumatology,
Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine,
Graduate School of Medicine, Nagoya Univ. ...S738

14 : 40 ~ 15 : 40 Afternoon seminar 5 Moderator T. Kumai

3-11-AS5 The White Giants of PRP: Rethinking regeneration beyond platelets
 *Yuki Shimizu*, THE YOKOHAMA FRONT BAYSIDE CLINIC...S739

**15 : 55 ~ 17 : 15 Symposium 55 Moderators S. Arai, K. Takeshita
 20 years of progress in locomotive syndrome and future perspectives**

3-11-S55-1 Locomotive syndrome research in the ROAD Study: A bridge between past, present,
 and future
 *Noriko Yoshimura, et al.*, Dept. of Preventive Medicine for Locomotive Organ Disorders,
 22nd Century Medical and Research Center,
 Graduate School of Medicine, The Univ. of Tokyo...S740

3-11-S55-2 Osteoarthritis of the knee as a cause of Locomotive Syndrome: Present and future
 *Muneaki Ishijima, et al.*, Dept. of Orthop., Juntendo Univ...S740

3-11-S55-3 Locomotive syndrome in cancer patients
 *Yusuke Shinoda*, Dept. of Rehabilitation Medicine, Saitama Medical Univ...S741

3-11-S55-4 Considering children's musculoskeletal health (measures against locomotive syndrome):
 20 years of progress and the future of locomotive syndrome
 *Etsuo Chosa*, Junwakai Memorial Hosp./Univ. of Miyazaki...S741

3-11-S55-5 Prevention of locomotive syndrome in persons with disabilities
 *Toru Ogata*, Rehabilitation Center, The Univ. of Tokyo Hosp...S742

17 : 30 ~ 18 : 30 Instructional lecture 40 Moderator T. Suzuki

3-11-EL40 The overlooked thoracic outlet syndrome: Refractory upper limb symptoms in general and
 sports practice, 1,000 surgical cases *Kozo Furushima*, Keiyu Orthop. Hosp...S743

3rd Day May 23 Room 12

**8 : 00 ~ 9 : 00 Free papers 71 Moderators K. Hasegawa, Y. Matsubayashi
 Spinal alignment**

3-12-1 Redefining alignment goals: A novel corrective strategy incorporating hip alignment in adult
 spinal deformity
 *Kohei Takahashi, et al.*, Dept. of Orthop. Surg., Tohoku Univ. Graduate School of Medicine...S744

3-12-2 Does preoperative spinopelvic sagittal imbalance negatively affect patient-reported outcomes
 following lumbar spinal stenosis surgery?
 *Shota Tamagawa, et al.*, Dept. of Orthop., Juntendo Univ...S744

3-12-3 Association between lumbar multifidus muscle atrophy and spinal-pelvic alignment
 *Katsuro Ura, et al.*, Dept. of Orthop. Surg., Otaru General Hosp...S745

3-12-4 Risk factors for rapid deterioration of spinal sagittal global alignment: A 10-year study in a
 community cohort
 *Yu Yamato, et al.*, Dept. of Orthop. Surg., Hamamatsu Univ. School of Medicine...S745

3-12-5 Ten-year longitudinal quality of life decline and spinopelvic alignment changes: Findings from the
 Toei community cohort
 *Hideyuki Arima, et al.*, Dept. of Orthop. Surg., Hamamatsu Univ. School of Medicine...S746

3-12-6 Effect of nutritional and exercise intervention on whole-spine radiographic alignment in community
 health checkups: Prospective randomized controlled trial
 *Shin Oe, et al.*, Dept. of Orthop. Surg., Hamamatsu Univ. School of Medicine...S746

9 : 15 ~ 10 : 15 Instructional lecture 41**Moderator H. Chikuda**

- 3-12-EL41 Research ethics, ELSI and RRI (responsible research and innovation)
 *Yuko Fujigaki*, Dept. of General System Studies,
 Graduate School of Arts and Sciences, The Univ. of Tokyo...S747

10 : 30 ~ 11 : 30 Free papers 72 Spine: Imaging**Moderators M. Watanabe, T. Nakamae**

- 3-12-7 Novel navigation system for ultrasound-guided nerve root block using fusion imaging and SMI technology *Manabu Maeda, et al.*, Maeda Orthop...S748
- 3-12-8 Development of a non-invasive method for neurofunctional assessment of L5 foraminal lesions using magnetoneurography *Satoshi Tamura, et al.*, Dept. of Orthop. and Spinal Surg., Graduate School of Medical and Dental Sciences, Institute of Science Tokyo...S748
- 3-12-9 Neurological assessment of patients with cervical spinal cord injury using advanced diffusion MRI (Neurite orientation dispersion and density imaging: NODDI) *Tatsuo Makino, et al.*, Div. of Orthop. Surg., Dept. of Regenerative and Transplant Medicine, Niigata Univ. Graduate School of Medical and Dental Sciences...S749
- 3-12-10 Redefining painful Modic change: Involvement of type 2 and type 3 in painful Modic *Saori Soeda, et al.*, Dept. of Orthop., Institute of Biomedical Sciences, Tokushima Univ. Graduate School...S749
- 3-12-11 Subchondral bone MRI STIR hyperintensity is associated with low back pain severity before and after surgery for lumbar spinal stenosis *Shota Tamagawa, et al.*, Dept. of Orthop., Juntendo Univ...S750
- 3-12-12 Differential diagnosis between schwannoma and meningioma by cine MRI *Kyoichi Handa, et al.*, Dept. of Orthop. Surg., Tohoku Medical and Pharmaceutical Univ...S750

12 : 00 ~ 13 : 10 Luncheon seminar 35**Moderator T. Kabata**

- 3-12-LS35-1 Hip arthroplasty via an anterior approach with a conventional fracture traction table aimed at the forgotten joint *Tomonori Baba*, Dept. of Orthop., Juntendo Univ...S751
- 3-12-LS35-2 Redefining precision and minimal invasiveness in total hip arthroplasty: The synergy of robotic-arm assistance and the direct anterior approach *Masashi Fujii, et al.*, Dept. of Orthop. Surg., Akita City Hosp...S751

13 : 25 ~ 14 : 25 Free papers 73 Spine: Miscellaneous**Moderators T. Tachibana, K. Watanabe**

- 3-12-13 Significance of extended culture for pathogen detection in infectious spondylitis *Shinji Tanishima, et al.*, Dept. of Orthop. Surg., Tottori Univ...S752
- 3-12-14 Factors associated with the discrepancy between postoperative satisfaction and recommendation after spine surgery: A multicenter study *Hiroyuki Nakarai, et al.*, Dept. of Orthop. Surg., The Univ. of Tokyo Hosp., The Univ. of Tokyo...S752
- 3-12-15 Utility of smart shoes for gait evaluation in patients with lumbar spinal canal stenosis *Masatsugu Tsukamoto, et al.*, Dept. of Orthop. Surg., Saga Univ...S753
- 3-12-16 Residual idiopathic cerebrospinal fluid leakage leads to the development of superficial siderosis on average 19.6 years later *Satoru Egawa, et al.*, Dept. of Orthop. and Trauma Research, Graduate School of Medical and Dental Sciences, Institute of Science Tokyo...S753
- 3-12-17 Challenge of hepatocyte growth factor for severe cervical spinal cord injury *Kazuya Kitamura, et al.*, Dept. of Orthop. Surg., National Defense Medical College...S754
- 3-12-18 A novel disease concept of hip joint disorder following spinopelvic fixation: Clinical validation of adjacent joint disease *Takuhei Kozaki, et al.*, Dept. of Orthop. Surg., Wakayama Medical Univ...S754

14 : 40 ~ 15 : 40 Afternoon seminar 6

Moderator I. Sekiya

- 3-12-AS6-1 APS therapy for osteoarthritis of the thumb and fingers
..... *Masaaki Kawano*, Kousei General Hosp. ...S755
- 3-12-AS6-2 Follow-up on APS therapy for knee osteoarthritis
..... *Ayano Kuwasawa, et al.*, Dept. of Orthop. Surg., Saitama Cooperative Hosp. ...S755

15 : 55 ~ 17 : 15 Symposium 56

Moderators Y. Tajiri, A. Terakado

Protecting the future of orthopaedics: Responses to medical fee revisions

- 3-12-S56-1 Revisions in the reimbursement schedule for orthopaedic surgery
..... *Yuki Ishikawa*, Medical Economics Div.,
Health Insurance Bureau, Ministry of Health, Labour and Welfare ...S756
- 3-12-S56-2 Management of medical fee revisions as a member of Gaihoren working committee of
the Japan Orthopaedic Surgeons Association
..... *Makoto Kameyama*, Dept. of Orthop. Surg., Saiseikai Mukoujima Hosp. ...S756
- 3-12-S56-3 Response to medical fee revisions in the field of spinal surgery
... *Yutaka Hiraizumi*, Dept. of Orthop. Surg., Showa Medical Univ./Seijo Rehabilitation Hosp. ...S757
- 3-12-S56-4 Reimbursement systems in orthopaedic trauma care: Transitioning from life-saving-centered
medicine to function-restoring medicine
..... *Nobuyuki Takenaka*, Tokyo D-Tower Hosp. /Dept. of Traumatology,
Fukushima Medical Univ. ...S757
- 3-12-S56-5 Response to the revision of medical reimbursement in the field of bone and soft tissue tumors
..... *Hideo Morioka, et al.*, Dept. of Orthop. Surg., Tokyo Medical Center ...S758
- 3-12-S56-6 Strategies for the revision of medical fee in the shoulder joint field
..... *Tomoyuki Mochizuki, et al.*, Dept. of Orthop. Surg., Tokyo Kita Medical Center ...S758

17 : 30 ~ 18 : 30 Instructional lecture 42

Moderator K. Yamada

- 3-12-EL42 Pitfalls in antibiotic selection and strategies for appropriate antimicrobial use in infectious
disease management ... *Toshiumi Taniguchi*, Dept. of Infectious Diseases, Chiba Univ. Hosp. ...S759

3rd Day May 23 Room 13

8 : 00 ~ 9 : 00 Free papers 74 Wrist and hand trauma

Moderators K. Morita, Y. Zenke

- 3-13-1 Finger replantation training model for early-career surgeons
..... *Naoko Masuyama, et al.*, Dept. of Orthop. Surg., Kanto Rosai Hosp. ...S760
- 3-13-2 Fixation angle of distal interphalangeal joint in steel wire fixation with extension block pin
(Ishiguro method) for bony mallet ... *Yugo Takizawa, et al.*, Dept. of Orthop. Surg., Aizawa Hosp. ...S760
- 3-13-3 Comparison of clinical outcomes between volar plate fixation and external fixation for dorsal
fracture dislocations of the PIP joint
..... *Hiroki Yokoyama, et al.*, Div. of Human Enhancement & Hand Surg.,
Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine,
Graduate School of Medicine, Nagoya Univ. ...S761
- 3-13-4 Breakthrough external fixator innovation: Kinematic reduction for proximal interphalangeal
joint fractures *Katsuyasu Fukasawa, et al.*, Dept. of Orthop. Surg., Kanto Rosai Hosp. ...S761
- 3-13-5 Finite element analysis of various fixation methods for proximal phalanx fractures
..... *Kensho Suzuki, et al.*, Dept. of Orthop. Surg.,
Graduate School of Medical Sciences, Kanazawa Univ. ...S762

- 3-13-6 Radiocapitate distance and functional outcomes in extra-articular distal radius fractures
 *Hiromasa Wakita, et al.*, Dept. of Orthop. Surg.,
 Showa Medical Univ. Northern Yokohama Hosp. ...S762

9 : 15 ~ 10 : 15 Free papers 75

Moderators H. Yanagida, N. Nakamura

Pediatric orthopaedics: Spine/miscellaneous

- 3-13-7 Comprehensive correction and trunk stability after posterior thoracic-pelvic fixation for non-ambulant neuromuscular scoliosis: Quality of life evaluation using CPCHILD
 *Shimei Tanida, et al.*, Dept. of Orthop. Surg., Shiga General Hosp. ...S763
- 3-13-8 Surgical outcomes of posterior spinal fusion using the all-pedicle screw technique for severe AIS
 *Masaki Kawamura, et al.*, Dept. of Orthop. Surg., Scoliosis Center, Osaka City General Hosp. ...S763
- 3-13-9 Factors affecting the difficulty of transfer in adult patients with neuromuscular scoliosis surgery
 *Naoyuki Nakamura, et al.*, Dept. of Orthop. Surg., Kanagawa Children's Medical Center ...S764
- 3-13-10 Ulnar nerve instability in healthy children: 93% cross the medial epicondyle beyond 90° elbow flexion
 *Tomoo Nakagawa, et al.*, Dept. of Orthop. Surg., Higashikawaguchi Hosp. ...S764
- 3-13-11 Clinical outcomes of lateral condyle fractures of the humerus in children using cerclage compression wiring with absorbable sutures
 *Shutaro Aiba, et al.*, Dept. of Orthop. Surg., Mito Saiseikai General Hosp. ...S765
- 3-13-12 Impact of university hospital training on residents' performance in radiographic diagnosis of developmental dysplasia of the hip
 *Kenichi Mishima, et al.*, Dept. of Orthop./Rheumatology, Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine, Graduate School of Medicine, Nagoya Univ. ...S765

10 : 30 ~ 11 : 30 Free papers 76

Moderators T. Tateiwa, K. Yamada

Infection: Treatment and prevention

- 3-13-13 Diagnostic accuracy of rapid molecular diagnostics using implant sonication fluid in periprosthetic joint infection of the hip
 *Yuta Hieda, et al.*, Dept. of Orthop. Surg., Yokohama City Univ. Hosp. ...S766
- 3-13-14 Incidence of elevated serum gentamicin levels in cases treated with continuous local antibiotic perfusion (CLAP)
 *Masaki Shimoda, et al.*, Musculoskeletal Science, Yokohama City Univ. Graduate School of Medicine ...S766
- 3-13-15 Chronological changes of *C. acnes* incidence ratio in the surgical field of shoulder joint: Effect of iodophor-impregnated plastic adhesive drape
 *Hisahiro Tonotsuka, et al.*, Dept. of Orthop. Surg., Kanagawa Rehabilitation Hosp. ...S767
- 3-13-16 PJI-TNM classification and early surgical outcomes: A retrospective study of 74 hip and knee periprosthetic joint infections
 *Yohei Kumabe, et al.*, Dept. of Orthop. Surg., Kobe Univ. Graduate School of Medicine ...S767
- 3-13-17 Present status of infection prevention modalities in arthroplasty: Data from nationwide registry
 *Takeshi Morii, et al.*, Dept. of Orthop. Surg., Kyorin Univ. ...S768
- 3-13-18 The effect of silver-containing hydroxyapatite-coated cages on surgical site infection rates after posterior lumbar interbody fusion
 *Masatsugu Tsukamoto, et al.*, Dept. of Orthop. Surg., Saga Univ. ...S768

12 : 00 ~ 13 : 10 Luncheon seminar 36

Moderator T. Nikaido

- 3-13-LS36-1 Initiatives of private orthopaedic institutions in a low-birthrate, aging-society: Aiming to further improve the quality of low back pain treatment
 *Takeshi Sainoh, et al.*, Dept. of Orthop. Surg., Sainou Hosp. ...S769

3-13-LS36-2 Practical pharmacotherapy for chronic low back pain based on the Japanese Clinical Practice Guidelines 2019: Clinical pearls for tomorrow's practice
 *Kazuhide Inage*, Dept. of Orthop. Surg., Graduate School of Medicine, Chiba Univ.··S769

13 : 25 ~ 14 : 25 Free papers 77 Metastatic disease Moderators Y. Matsumoto, H. Hara

- 3-13-19 Employment barriers in patients with bone metastases: An orthopaedic approach for balancing cancer treatment and work
 *Ryoko Sawada, et al.*, Dept. of Orthop. Surg., Kobe Univ. Graduate School of Medicine··S770
- 3-13-20 Association between KRAS mutations and the development of skeletal-related events in gastrointestinal cancers with bone metastases
 *Shin Ishihara, et al.*, Dept. of Orthop. Surg., NHO Kyushu Cancer Center··S770
- 3-13-21 Bone sclerosis and clinical outcomes in metastatic bone tumors treated with immune checkpoint inhibitors *Kan Ito, et al.*, Div. of Orthop. Oncology, Shizuoka Cancer Center··S771
- 3-13-22 Association of sarcopenia indices with SRE-free survival in patients with bone metastases
 *Hiroshi Koike, et al.*, Dept. of Orthop. Surg., Nagoya Univ. Hosp.··S771
- 3-13-23 Clinical courses of osteonecrosis of the jaw induced by bone-modifying agent in patients with bone metastases
 *Yusuke Tsuda, et al.*, Dept. of Orthop. Surg., The Univ. of Tokyo Hosp., The Univ. of Tokyo··S772
- 3-13-24 Association of osteoporosis risk with bone metastasis after surgery for early-stage breast cancer in premenopausal women produced by deep learning
 *Hirokazu Shimizu, et al.*, Dept. of Orthop. Surg.,
 Faculty of Medicine and Graduate School of Medicine, Hokkaido Univ.··S772

**14 : 40 ~ 15 : 40 Free papers 78 Moderators T. Ochiai, R. Murakami
 Pediatric orthopaedics: Lower limb**

- 3-13-25 Toddler's limb alignment may be influenced by maternal vit D up to 6 months of age, and by UV thereafter *Yuko Sakamoto, et al.*, Dept. of Orthop. Surg., Juntendo Univ. Nerima Hosp.··S773
- 3-13-26 Development and accuracy validation of a real-time AI-assisted ultrasound diagnostic system for developmental dysplasia of the hip *Yusuke Ohashi, et al.*, Dept. of Orthop. Surg.,
 Faculty of Medicine and Graduate School of Medicine, Hokkaido Univ.··S773
- 3-13-27 Effect of eight-plate guided growth on genu varum and ankle varus in patients with achondroplasia
 *Shigemasa Komatsu, et al.*, Dept. of Orthop. Surg., Miyagi Children's Hosp.··S774
- 3-13-28 A new strategy for congenital pseudarthrosis of the tibia: Prevention of refracture by conversion from external fixation to locking plate
 *Hidenori Matsubara, et al.*, Dept. of Innovative Community Medicine and Orthop. Surg.,
 Graduate School of Medical Sciences, Kanazawa Univ.··S774
- 3-13-29 Clinical profile of pediatric knee pain without abnormal findings on arthroscopy
 *Tetsuhiro Hagino, et al.*, Dept. of Orthop. Surg., Kofu National Hosp.··S775
- 3-13-30 Ponseti procedure for clubfoot with over 15 years follow-up: Additional surgery can be predicted within one year of initial treatment *Myongsu Ha, et al.*, Dept. of Orthop. Surg.,
 Nagoya City Univ., Graduate School of Medical Sciences··S775

**15 : 55 ~ 17 : 15 Symposium 57 Moderators Y. Mikami, M. Yamazaki
 Current status and future vision of university medical departments**

- 3-13-S57-1 The mission of university hospitals in regional healthcare: Beyond care, research and education *Shuichiro Hayashi*, Medical Economics Div.,
 Health Insurance Bureau, Ministry of Health, Labour and Welfare··S776

- 3-13-S57-2 Incorporation of the department of cardiovascular surgery
 *Kagami Miyaji*, Dept. of Cardiovascular Surg., Kitasato Univ., School of Medicine...S776
- 3-13-S57-3 Incorporation of the Okayama University Orthopaedic Alumni Association
 *Toshifumi Ozaki, et al.*, Dept. of Orthop. Surg.,
 Science of Functional Recovery and Reconstruction, Faculty of Medicine,
 Dentistry, and Pharmaceutical Sciences, Okayama Univ...S777
- 3-13-S57-4 The family-like medical department run by the most undignified professor in Japan
 *Hideki Murakami, et al.*, Dept. of Orthop. Surg.,
 Nagoya City Univ., Graduate School of Medical Sciences...S777
- 3-13-S57-5 Supporting women orthopaedic surgeons' career continuity: Actions for academic departments
 *Sayaka Komine, et al.*, Dept. of Orthop. Surg.,
 The Univ. of Tokyo Hosp., The Univ. of Tokyo...S778

17 : 30 ~ 18 : 30	Free papers 79 OPLL	Moderators T. Aizawa, M. Koda
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- 3-13-31 Satisfaction with returning to work after cervical OPLL surgery: JOSL study
 *Kanji Mori, et al.*, Dept. of Spine and Joint Reconstruction, Shiga Univ. of Medical Science...S779
- 3-13-32 Epidemiology and risk factors of ossification of the posterior longitudinal ligament in health
 screening settings
 *Ryo Mizukoshi, et al.*, Dept. of Orthop. Surg., International Univ. of Health and Welfare...S779
- 3-13-33 Metabolic dysfunction-associated steatotic liver disease (MASLD) as a new risk factor for
 ossification of the spinal ligaments *Shotaro Fukada, et al.*, Dept. of Orthop. Surg.,
 Faculty of Medicine and Graduate School of Medicine, Hokkaido Univ...S780
- 3-13-34 Clinical evaluation of the efficacy and safety of CT myelography in thoracic ossification of the
 posterior longitudinal ligament *Narimichi Takino, et al.*, Dept. of Orthop. Surg.,
 Graduate School of Medical Sciences, Kanazawa Univ...S780
- 3-13-35 Influence of thoracolumbar sagittal alignment on fracture dislocation in diffused idiopathic
 skeletal hyperostosis: A nationwide multi institution survey
 *Yuya Okada, et al.*, Dept. of Orthop./Rheumatology,
 Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine,
 Graduate School of Medicine, Nagoya Univ...S781
- 3-13-36 Mid-term surgical outcomes for posterior lumbar interbody fusion for lumbar spinal stenosis with
 diffuse idiopathic skeletal hyperostosis
 *Masahiro Ozaki, et al.*, Dept. of Orthop. Surg., Keio Univ...S781

3rd Day May 23 Poster Room 1

9 : 15 ~ 9 : 45	Poster presentation 22 Tumor: Miscellaneous	Moderator S. Iwata
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- 3-Po-1 Clinical significance of comprehensive genomic profiling in the diagnosis and treatment of
 sarcomas: Insights from our institutional database
 *Shunji Nishimura, et al.*, Dept. of Orthop. Surg., Kindai Univ. Faculty of Medicine...S782
- 3-Po-2 Multifactorial analysis using pre-chemotherapy information to predict favorable response
 in osteosarcoma *Naohiro Shinohara, et al.*, Dept. of Orthop. Surg.,
 Graduate School of Medical and Dental Sciences, Kagoshima Univ...S782
- 3-Po-3 AORIF for acetabular metastases contributes to early initiation of cancer therapy: Mid-term results
 of four cases from our institution
 *Taisuke Matsuyama, et al.*, Dept. of Orthop. Surg., Teikyo Univ...S783

- 3-Po-4 Clinical outcomes of prophylactic intramedullary nailing to prevent post-radiation fractures in soft tissue sarcoma of the lower extremity
*Jun Iwatsu, et al.*, Dept. of Musculoskeletal Oncology and Rehabilitation., National Cancer Center Hosp.···S783
- 3-Po-5 Megaprosthesis reconstruction for bone tumors around the knee: Implant survival and functional outcomes in pediatric and adolescent/young adult patients
*Kunihiro Ikuta, et al.*, Dept. of Orthop./Rheumatology, Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine, Graduate School of Medicine, Nagoya Univ.···S784
- 3-Po-6 Clinical outcomes of 13 cases of Langerhans cell histiocytosis including 2 with Erdheim-Chester disease*Masanori Okamoto, et al.*, Dept. of Orthop. Surg., Shinshu Univ.···S784

10 : 05 ~ 10 : 40	Poster presentation 23 Tumor: Soft tissue sarcoma	Moderator J. Wasa
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- 3-Po-7 Characteristic MRI features of atypical spindle cell/pleomorphic lipomatous tumor
*Jiro Ichikawa, et al.*, Dept. of Orthop. Surg., Graduate School of Medical Science, Univ. of Yamanashi···S785
- 3-Po-8 Treatment outcomes for angiosarcoma (analysis by pathogenesis)
*Masanori Saito, et al.*, Dept. of Orthop. Surg., Cancer Institute Hosp.···S785
- 3-Po-9 Surgical resection and prognostic factors in initial pulmonary metastasis after soft tissue sarcoma: Multivariate and ROC analysis*Ryu Terauchi, et al.*, Dept. of Orthop., Graduate School of Medical Science, Kyoto Prefectural Univ. of Medicine···S786
- 3-Po-10 Do pre-hospital factors, including geographical factors, affect the prognosis of high-grade soft tissue sarcoma?*Takanao Kurozumi, et al.*, Dept. of Orthop. Surg., Science of Functional Recovery and Reconstruction, Faculty of Medicine, Dentistry, and Pharmaceutical Sciences, Okayama Univ.···S786
- 3-Po-11 Histology-based treatment strategy for lower extremity soft tissue sarcomas adjacent to bone: Validation by disease-free survival and local control
*Hiroya Kondo, et al.*, Dept. of Medical Materials for Musculoskeletal Reconstruction, Faculty of Medicine, Dentistry, and Pharmaceutical Sciences, Okayama Univ.···S787
- 3-Po-12 Oncological outcomes of spinal/paraspinal Ewing sarcoma arising in the trunk
*Yoichi Kaneuchi, et al.*, Dept. of Orthop. Surg., Fukushima Medical Univ.···S787
- 3-Po-13 Risk factors for perioperative complications in surgery for retroperitoneal sarcoma
*Makoto Yamaguchi, et al.*, Dept. of Orthop. Surg., Nagoya City Univ. Hosp.···S788

10 : 55 ~ 11 : 30	Poster presentation 24 Metastatic disease	Moderator R. Sawada
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- 3-Po-14 Clinical outcomes and prognostic factors of bone metastases from lung cancer
*Masaki Takahashi, et al.*, Dept. of Orthop. Surg., Tsuruoka Municipal Shonai Hosp.···S789
- 3-Po-15 A clinical study of lung cancer cases with bone metastases showing osteosclerotic features
*Tamon Asano, et al.*, Dept. of Orthop. Surg., Yamagata Prefectural Central Hosp.···S789
- 3-Po-16 Clinical outcomes of bone metastases from lung cancer according to histological subtypes
*Masaki Takahashi, et al.*, Dept. of Orthop. Surg., Tsuruoka Municipal Shonai Hosp.···S790
- 3-Po-17 Impact of surgical treatment on patient reported outcome in patients with spinal metastases from prostate cancer*Ryosuke Hirota, et al.*, Dept. of Orthop. Surg., Sapporo Medical Univ.···S790
- 3-Po-18 Prognostic value of combining the new Katagiri score and systemic inflammation response index in patients with long bone metastases
*Shintaro Fujita, et al.*, Dept. of Orthop. Surg., Yokohama City Univ. Hosp.···S791
- 3-Po-19 Characteristics and postoperative outcomes in spinal metastases of cancer of unknown primary: JASA multicenter prospective cohort study
*Ryosuke Hirota, et al.*, Dept. of Orthop. Surg., Sapporo Medical Univ.···S791

3-Po-20 A novel therapeutic strategy for cancer cachexia: Oral administration of antioxidative particles via the gut-muscle axis *Taisuke Furuta, et al.*, Dept. of Orthop. Surg., Hiroshima Univ. Hosp. ...S792

14 : 40 ~ 15 : 15	Poster presentation 25	Moderator N. Mizuno
Rotator cuff injury/miscellaneous		

- 3-Po-21 Fatty degeneration and muscle atrophy of the non-torn supraspinatus muscle progress with age *Tsuyoshi Sukenari, et al.*, Dept. of Orthop., Graduate School of Medical Science, Kyoto Prefectural Univ. of Medicine ...S793
- 3-Po-22 Endoscopic-assisted infraclavicular approach or transaxially first rib resection in thoracic outlet syndrome *Taku Suzuki, et al.*, Dept. of Orthop. Surg., Keio Univ. ...S793
- 3-Po-23 The involvement of preoperative shoulder stiffness and coracohumeral ligament thickening in postoperative outcomes after arthroscopic rotator cuff repair *Ryosuke Takahashi, et al.*, Dept. of Orthop. Surg., Ichinomiya Nishi Hosp. ...S794
- 3-Po-24 Results of arthroscopic rotator cuff repair with G-CSF administration *Ryosuke Miyamoto*, Dept. of Orthop. Surg., Gunma Univ. Graduate School of Medicine ...S794
- 3-Po-25 Signal intensity of the inferior glenohumeral ligament before and after rotator cuff repair and their relationship to postoperative shoulder stiffness *Takayuki Oishi, et al.*, Dept. of Orthop. Surg., St. Luke's International Hosp. ...S795
- 3-Po-26 Association between pain catastrophizing thoughts and postoperative outcomes following arthroscopic rotator cuff repair *Kazuki Ozaki, et al.*, Dept. of Orthop. Surg., Kochi Medical School, Kochi Univ. ...S795
- 3-Po-27 A novel classification of subscapularis muscle atrophy and its clinical relevance in rotator cuff tears *Wataru Sahara, et al.*, Dept. of Orthop. Surg., Graduate School of Medicine, The Univ. of Osaka ...S796

15 : 30 ~ 16 : 10	Poster presentation 26	Shoulder arthroplasty	Moderator N. Matsumura
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- 3-Po-28 10-year results of reverse shoulder arthroplasty in our experience *Shin Yoshimura, et al.*, Dept. of Orthop. Surg., Graduate School of Medicine, Chiba Univ. ...S797
- 3-Po-29 Risk factors for stem subsidence in reverse shoulder arthroplasty using a 135-degree inlay humeral implant *Suguru Mori, et al.*, Dept. of Orthop. Surg., Kishima Hon-in Hosp. ...S797
- 3-Po-30 Longitudinal changes in bone mineral density after total and reverse shoulder arthroplasty: A DEXA-based study *Katsumasa Nakazawa, et al.*, Dept. of Orthop. Surg., Osaka Metropolitan Univ. Graduate School of Medicine ...S798
- 3-Po-31 Preoperative HbA1c and long-term outcomes after shoulder arthroplasty: A multicenter real-world propensity score-matched analysis using the TriNetX network *Akinobu Kawada, et al.*, Dept. of Orthop. Surg., Kagawa Univ. Hosp. ...S798
- 3-Po-32 Outcomes of reverse shoulder arthroplasty with subscapularis tendon transfer: Impact of implant lateralization *Hideki Kinjo, et al.*, Dept. of Orthop. Surg., Kaisei Hosp. ...S799
- 3-Po-33 Implant-based comparison of postoperative lateralization and distalization following reverse shoulder arthroplasty: Via AP radiographs *Eriki Yanagi, et al.*, Kashibaseiki Hosp. ...S799
- 3-Po-34 Clinical outcomes of reverse shoulder arthroplasty in patients with deltoid tears: A multicenter study *Yohei Harada, et al.*, Dept. of Orthop. Surg., Graduate School of Biomedical and Health Sciences, Hiroshima Univ. ...S800
- 3-Po-35 Pre- and postoperative changes in scapular internal rotation and postoperative results of reverse shoulder arthroplasty *Shuhei Matsumura, et al.*, Dept. of Orthop. Surg., Hiroshima Univ. Hosp. ...S800

16 : 20 ~ 16 : 55 **Poster presentation 27 Osteoporosis: Bone evaluation** Moderator **C. Maeda**

- 3-Po-36 Evaluation of bone quality using sacral Hounsfield unit values and its associated clinical factors
 *Yoshimichi Onose, et al.*, Dept. of Orthop. Surg., St. Marianna Univ. School of Medicine...S801
- 3-Po-37 Preoperative bone mineral density and bone metabolic marker comparison between spontaneous
 osteonecrosis of the knee and osteoarthritis in UKA
 *Keiichiro Yamamoto, et al.*, Dept. of Orthop. Surg., Toho Univ. Sakura Medical Center...S801
- 3-Po-38 Femoral neck bone mineral density is lower than lumbar spine bone mineral density at the time
 of primary knee arthroplasty
 *Hiroyuki Oonuma, et al.*, Dept. of Orthop. Surg., Kawasaki Municipal Tama Hosp. ...S802
- 3-Po-39 Association between bone mineral density and muscle strength in community-dwelling older
 adults: Evaluation by REMS
 *Yusuke Okanoue, et al.*, Dept. of Orthop. Surg., Kochi Medical School, Kochi Univ....S802
- 3-Po-40 Changes in bone mineral density and their determinants in patients with knee osteoarthritis
 undergoing knee arthroplasty
 *Mitsuhiko Kubo, et al.*, Dept. of Sports and Musculoskeletal Medicine,
 Shiga Univ. of Medical Science...S803
- 3-Po-41 Osteoporosis treatment that contributes to improving the safety of UKA: A bone density approach
 *Ken Uchida*, Dept. of Orthop. Surg., Uchida Hosp....S803
- 3-Po-42 Correlation between hip Hounsfield units and DEXA measurements, and the predictive value of
 hip HU for osteoporosis *Shuhei Haruta*, Dept. of Orthop. Surg., Kariya Toyota General Hosp....S804

17 : 10 ~ 17 : 45 **Poster presentation 28** Moderator **H. Fujimaki**
Osteoporosis: Fracture evaluation

- 3-Po-43 Reduced association between anteromedial cortical thickness and bone mineral density in
 femoral neck fracture sides
 *Munehiro Naruo, et al.*, Dept. of Orthop. Surg., Tomei Atsugi Hosp....S805
- 3-Po-44 Risk factors associated with contralateral hip fracture after initial hip fracture in the elderly
 patients (J-BOLD study) *Shinichi Ueki, et al.*, Dept. of Orthop. Surg.,
 Graduate School of Biomedical and Health Sciences, Hiroshima Univ....S805
- 3-Po-45 Patient characteristics associated with fracture cascade in osteoporotic vertebral
 compression fracture
 *Nobuyuki Suzuki, et al.*, Dept. of Musculoskeletal Health Promotion Medicine,
 Nagoya City Univ., Graduate School of Medical Sciences...S806
- 3-Po-46 Association between bone mineral density, nutritional status, oral function, and number of
 remaining teeth in hip fracture patients
 *Koji Nakajima, et al.*, Dept. of Orthop. Surg., Iwata City Hosp....S806
- 3-Po-47 Prevention of fragility fractures in children with cerebral palsy and the significance of
 functional training
 *Yoshimi Asagai, et al.*, Dept. of Orthop. Surg., Shinano Handicapped Children's Hosp....S807
- 3-Po-48 Timing of PTH initiation for osteoporotic vertebral fractures
 *Takuma Ogura, et al.*, Dept. of Orthop. Surg., Kagoshima Univ. Hosp....S807
- 3-Po-49 Relationship between trabecular bone score (TBS) and bone metabolic markers in middle-aged
 and older women with distal radius fractures
 *Yusuke Kubo, et al.*, Dept. of Orthop. Surg., Iizuka Hosp....S808

3rd Day May 23 Poster Room 2

9 : 15 ~ 9 : 50 Poster presentation 29 Spinal deformity Moderator B. Otsuki

- 3-Po-50 Changes of pelvic kinematics during gait between before and after long-segment fusion surgery in patients with adult spinal deformity
 *Masanari Takami, et al.*, Dept. of Orthop. Surg., Wakayama Medical Univ.···S809
- 3-Po-51 Hip extension determines trunk forward lean during gait: A 3D motion analysis and radiographic study in patients with spinal kyphosis
 *Keisuke Ishikawa, et al.*, Dept. of Orthop. Surg., Tohoku Univ. Graduate School of Medicine···S809
- 3-Po-52 Risk factors for proximal or distal junctional kyphosis and revision rates in corrective thoracolumbar surgery
 *Yoshinori Ishikawa, et al.*, Dept. of Orthop. Surg., Akita Kousei Medical Center···S810
- 3-Po-53 Preventive effect of PJK after adult spinal deformity surgery using translaminar spinal tethering technique
 *Fumihiko Arizumi, et al.*, Dept. of Orthop. Surg., Hyogo Medical Univ.···S810
- 3-Po-54 The pedicle screw dynamization system is effective in reducing proximal junctional failure in surgery for adult spinal deformity
 *Yuki Onishi, et al.*, Dept. of Spine and Orthop. Surg., Japanese Red Cross Medical Center···S811
- 3-Po-55 The correlation between nutritional status, assessed by MNA-SF, and clinical outcomes in adult spinal deformity patients *Kotaro Oda, et al.*, Dept. of Orthop. Surg.,
 Graduate School of Medical Science, Univ. of Yamanashi···S811
- 3-Po-56 Lumbar lordosis control via tension-based inner rods bridging thoracic anchors and S2AIS: A pilot clinical study
 *Bungo Otsuki, et al.*, Dept. of Orthop. Surg., Graduate School of Medicine, Kyoto Univ.···S812

10 : 05 ~ 10 : 40 Poster presentation 30 Degenerative spine disease Moderator K. Harimaya

- 3-Po-57 A multicenter study on the incidence and risk factors of dysphagia after anterior cervical spine surgery *Motonori Hashimoto, et al.*, Dept. of Orthop. and Spinal Surg.,
 Graduate School of Medical and Dental Sciences, Institute of Science Tokyo···S813
- 3-Po-58 Adjacent segment disease after occipitocervical versus atlantoaxial fusion: A 10-year average follow-up comparative study
 *Takaki Kitamura, et al.*, Dept. of Orthop. Surg., Graduate School of Medicine, Chiba Univ.···S813
- 3-Po-59 Postoperative clinical outcomes of full endoscopic trans-Kambin's lumbar interbody fusion
 *Kiyoshi Yagi, et al.*, Dept. of Musculoskeletal Sports Medicine,
 Research and Innovation, Nagoya City Univ., Graduate School of Medical Sciences···S814
- 3-Po-60 Lumbar vertebroplasty using an exoscope: A comparison with microsurgery and evaluation of usefulness to medical personnel *Tomonori Itsuji, et al.*, Dept. of Orthop.,
 Graduate School of Medical Science, Kyoto Prefectural Univ. of Medicine···S814
- 3-Po-61 One-year postoperative outcomes of exoscopic minimally invasive cervical laminoplasty
 *Kentaro Yamane, et al.*, Dept. of Orthop. Surg., Okayama Medical Center···S815
- 3-Po-62 Influence of lumbar distribution index on clinical outcomes in lower lumbar interbody fusion
 *Yukitoshi Shimamura, et al.*, Dept. of Orthop. Surg., Hakodate Central General Hosp.···S815
- 3-Po-63 To what extent does symptom duration affect surgical outcomes?: A prospective multicenter analysis of 874 patients with degenerative cervical myelopathy
 *Narihito Nagoshi, et al.*, Dept. of Orthop. Surg., Keio Univ.···S816

10 : 55 ~ 11 : 25	Poster presentation 31 Spinal endoscopy	Moderator F. Saiki
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- 3-Po-64 Analysis of the learning curve for microendoscopic spine surgery using the CUSUM method
 *Yasuhiro Ueda, et al.*, Dept. of Orthop. Surg., Fukui Prefectural Hosp. ...S817
- 3-Po-65 Comparison of three endoscopic techniques for cervical myelopathy (MECL, FECL, and UBECL): Which provides the optimal decompression?
 *Zenya Ito, et al.*, Dept. of Orthop. Surg., Aichi Spine Hosp. ...S817
- 3-Po-66 Clinical results and adverse prognostic factors of full-endoscopic lumbar foraminoplasty (FELF) for lumbar foraminal stenosis *Yushi Yamaguchi, et al.*, Dept. of Orthop. Surg.,
 Field of Surg., Nippon Medical School, Graduate School of Medicine ...S818
- 3-Po-67 Clinical results of microendoscopic posterior decompression for lumbosacral foraminal stenosis: Considering the presence of degenerative scoliosis
 *Yasuhiro Ueda, et al.*, Dept. of Orthop. Surg., Fukui Prefectural Hosp. ...S818
- 3-Po-68 Efficacy of transforaminal full-endoscopic lumbar foraminotomy for lumbar foraminal stenosis with degenerative scoliosis: Minimally invasive strategy to avoid spinal fusion
 *Yuji Nagao, et al.*, Dept. of Orthop., Institute of Biomedical Sciences,
 Tokushima Univ. Graduate School ...S819
- 3-Po-69 Lumbar facet joint surface changes and postoperative segmental instability after transforaminal full-endoscopic spine surgery: A curved-MPR analysis
 *Shutaro Fujimoto, et al.*, Dept. of Orthop. Surg., Sapporo Medical Univ. ...S819

14 : 40 ~ 15 : 15	Poster presentation 32 Lumbar spine	Moderator T. Nikaido
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- 3-Po-70 LaRS technique and epidural endoscopic observation method are useful for preventing dural injury in unilateral biportal endoscopic spine surgery (UBE)
 *Seiji Yamaya, et al.*, Endoscopic Spine Surg. Center,
 Dept. of Orthop. Surg., Sendai Nishitaga Hosp. ...S820
- 3-Po-71 Clinical significance of posterior lumbar subcutaneous edema (PLSE): PLSE as an early predictor of postoperative spinal infection
 *Ryo Yamamura, et al.*, Dept. of Orthop. Surg., Showa Medical Univ. ...S820
- 3-Po-72 The laminae in lumbar degenerative spondylolisthesis are displaced caudally: Anatomical features from the perspective of laminotomy
 *Tomowaki Nakagawa, et al.*, Dept. of Orthop. Surg., Sendai Orthop. Hosp. ...S821
- 3-Po-73 Changes in spinopelvic alignment before and after total hip arthroplasty in patients with prior lumbar fusion *Takashi Toyoda, et al.*, Dept. of Orthop. Surg., Kansai Medical Univ. ...S821
- 3-Po-74 Effects of operative procedure and age of the psoas major in posterior lumbar interbody fusion patients *Yuji Hatakeyama, et al.*, Dept. of Orthop. Surg., Omagari Kosei Medical Center ...S822
- 3-Po-75 Dynamic radiographic comparison of posterior vertebral translation between extension and supine positions and analysis of determinants in lumbar degenerative spondylolisthesis
 *Fumitoshi Tajima, et al.*, Dept. of Orthop. Surg., Sapporo Medical Univ. ...S822
- 3-Po-76 Current status of treatment for neuropathic pain after lumbar spine surgery at our hospital
 *Yoshihide Tanaka, et al.*, Dept. of Orthop. Surg., Kitasato Univ Hosp. ...S823

15 : 30 ~ 16 : 05	Poster presentation 33 Vertebral fracture	Moderator Y. Yamato
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- 3-Po-77 Usefulness of VBQ score and HU value for predicting osteoporotic vertebral fractures
 *Kazuhiro Nanpo, et al.*, Dept. of Orthop. Surg.,
 Graduate School of Medical Sciences, Kanazawa Univ. ...S824
- 3-Po-78 Adjacent disc vacuum phenomenon as a risk factor for adjacent vertebral fracture after balloon kyphoplasty *Kento Okamoto, et al.*, Dept. of Orthop. Surg., Yuri Kumiai General Hosp. ...S824

- 3-Po-79 Minimally invasive anteroposterior fixation for osteoporotic vertebral fractures: Thoracolumbar junction vs. lower lumbar spine *Hayato Takei, et al.*, Dept. of Orthop. Surg., Graduate School of Medical Science, Univ. of Yamanashi...S825
- 3-Po-80 Vertebral body stenting versus balloon kyphoplasty for osteoporotic vertebral fractures: A propensity score matching study *Hiroyuki Hasebe, et al.*, Dept. of Orthop. Surg., Hokkaido Orthop. Memorial Hosp....S825
- 3-Po-81 Comparison of balloon versus stenting in percutaneous vertebroplasty for early intervention in osteoporotic vertebral fractures *Yasuaki Iida, et al.*, Dept. of Orthop. Surg., Japanese Red Cross Omori Hosp....S826
- 3-Po-82 Comparison of treatment outcomes between VBS (vertebral body stenting) and BKP (ballon kyphoplasty) *Akiyoshi Miyamoto, et al.*, Dept. of Orthop. Surg., Okayama Rosai Hosp....S826
- 3-Po-83 Comparison of treatment outcomes between vertebral body stenting and balloon kyphoplasty for osteoporotic vertebral fractures *Chugen Son, et al.*, Dept. of Spine Surg., JCHO Tokyo Yamate Medical Center...S827

16 : 20 ~ 16 : 55	Poster presentation 34 Fenestrated screw	Moderator S. Takahashi
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- 3-Po-84 Oblique view fluoroscopy improves detection of cement leakage in cement-augmented pedicle screw fixation *Kazuya Kishima, et al.*, Dept. of Orthop. Surg., Hyogo Medical Univ....S828
- 3-Po-85 Risk factors for cement leakage into segmental veins in posterior spinal fusion with fenestrated screws *Hayato Futakawa, et al.*, Dept. of Orthop. Surg., Faculty of Medicine, Univ. of Toyama...S828
- 3-Po-86 Evaluation of cement volume and cement leakage in cement-augmented pedicle screws: A study of 307 vertebrae *Tetsuto Yamaura, et al.*, Dept. of Orthop. Surg., Hyogo Medical Univ....S829
- 3-Po-87 Analysis of risk factors for cement leakage in cement augmented pedicle screws *Akimitsu Oyama, et al.*, Dept. of Orthop. Surg., Saiseikai Otaru Hosp....S829
- 3-Po-88 Clinical outcomes of vertebroplasty and short-segment posterior fixation using CAPS for osteoporotic vertebral fractures: A comparative study of fixation ranges *Kazuya Kishima, et al.*, Dept. of Orthop. Surg., Hyogo Medical Univ....S830
- 3-Po-89 Risk factors for cement leakage when using cement augmented fenestrated pedicle screw *Akiyoshi Miyamoto, et al.*, Dept. of Orthop. Surg., Okayama Rosai Hosp....S830
- 3-Po-90 Risk factors for intravascular cement leakage in cement-augmented pedicle screws: Focus on injection-hole orientation *Masahiro Kosaka, et al.*, Dept. of Spine Surg., Tokyo Metropolitan Geriatric Hosp. and Institute of Gerontology...S831

17 : 10 ~ 17 : 45	Poster presentation 35 Cervical spine	Moderator K. Wada
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- 3-Po-91 Surgical results of ACDF for degenerative cervical lesion *Kosei Ijiri, et al.*, Dept. of Orthop. Surg., Kirishima Orthop. Hosp....S832
- 3-Po-92 Investigation of the usefulness of the string method in postoperative management of cervical anterior surgery *Satoshi Tamura, et al.*, Dept. of Orthop. and Spinal Surg., Graduate School of Medical and Dental Sciences, Institute of Science Tokyo...S832
- 3-Po-93 Computed tomographic evaluation for modified paravertebral foramen screw for cervical spine fixation *Sadaki Mitsuzawa, et al.*, Dept. of Orthop. Surg., Graduate School of Medicine, Kyoto Univ....S833
- 3-Po-94 Efficacy and limitations of intensive inpatient rehabilitation for dropped head syndrome *Sho Ishikawa, et al.*, Dept. of Orthop. Surg., Atami Tokoro Memorial Hosp....S833
- 3-Po-95 Association between cervical extensor strength and quality of life in patients with dropped head syndrome *Tomoyuki Ueshima, et al.*, Dept. of Orthop. Surg., Tokyo Medical Univ....S834

- 3-Po-96 Smoking accelerates surgical intervention in cervical spondylotic myelopathy: Evidence from a multicenter prospective study
 *Yuto Kobayashi, et al.*, Dept. of Orthop. Surg., Osaka Metropolitan Univ. Hosp. ...S834
- 3-Po-97 Prevalence and risk of progression of atlantoaxial osteoarthritis: Insights from longitudinal health screening data *Takuma Nose, et al.*, Dept. of Orthop. Surg., Kurashiki Central Hosp. ...S835

3rd Day May 23 Poster Room 3

9 : 15 ~ 9 : 50	Poster presentation 36 TKA 1	Moderator S. Mori
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- 3-Po-98 Beyond muscle mass: Functional recovery after TKA through quality and mobility
 *Takafumi Mizuno, et al.*, Dept. of Orthop./Rheumatology, Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine, Graduate School of Medicine, Nagoya Univ. ...S836
- 3-Po-99 Effects of surgical procedure and postoperative time on recovery after total knee arthroplasty: A longitudinal analysis of WOMAC scores
 *Masamitsu Sakamoto, et al.*, Sonoda Joint Replacement Center Hosp. ...S836
- 3-Po-100 CT-based robotic-assisted TKA (Mako knee) improves one-year patient satisfaction through pain reduction and functional gains *Yoshiaki Okajima, et al.*, Dept. of Orthop. Surg., Joint Arthroplasty Center, Naniwa Ikuno Hosp. ...S837
- 3-Po-101 Temporal changes in catastrophizing thinking after total knee arthroplasty and its impact on postoperative patient satisfaction
 *Tomoka Kubo, et al.*, Dept. of Orthop. Surg., Ehime Univ. Graduate School of Medicine ...S837
- 3-Po-102 Kinematic analysis of different implant designs in total knee arthroplasty: A cadaveric study using a navigation system *Tomofumi Kinoshita, et al.*, Dept. of Orthop. Surg., Ehime Univ. Graduate School of Medicine ...S838
- 3-Po-103 Cadaveric comparison of knee kinematics after medial dished TKA with or without PCL versus those of the native knee *Shota Shigekiyo, et al.*, Dept. of Orthop., Institute of Biomedical Sciences, Tokushima Univ. Graduate School ...S838
- 3-Po-104 Motion analysis after TKA or UKA *Shu Kobayashi, et al.*, Dept. of Orthop. Surg., Keio Univ. ...S839

10 : 05 ~ 10 : 40	Poster presentation 37 TKA 2	Moderator S. Ishizuka
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- 3-Po-105 Postoperative global sagittal alignment after total knee arthroplasty: Stratification by preoperative T1 pelvic angle
 *Ryosuke Tsutsumi, et al.*, Dept. of Orthop. Surg., Univ. of Tsukuba Hosp. ...S840
- 3-Po-106 Postoperative outcomes after anatomical alignment total knee arthroplasty are independently associated with alignment correction but not with postoperative alignment
 *Mirei Kobayashi, et al.*, Dept. of Orthop. Surg., Tohoku Univ. Graduate School of Medicine ...S840
- 3-Po-107 Effects of total knee arthroplasty on coronal alignment of the lower limb, pelvis, and spine
 *Toshiya Uehara, et al.*, Dept. of Orthop. Surg., Tohoku Univ. Hosp. ...S841
- 3-Po-108 Comparison of postoperative ankle coronal alignment between mechanical and kinematic alignment techniques in total knee arthroplasty
 *Hajime Kobayashi, et al.*, Dept. of Orthop. Surg., Nihon Univ. ...S841
- 3-Po-109 Predicting postoperative severe varus alignment after kinematic alignment total knee arthroplasty in Japanese *Shuji Toyono, et al.*, Artificial Joint Center, Yamagata Saisei Hosp. ...S842
- 3-Po-110 Accuracy of implants in total knee arthroplasty using a new portable navigation system (AR KNEE)
 *Naoki Okamura, et al.*, Dept. of Orthop. Surg., Kuwana City Medical Center ...S842

3-Po-111 Retrospective real-world data collection on knee arthroplasty: Second report
*Kohei Nishitani, et al.*, Dept. of Orthop. Surg., Graduate School of Medicine, Kyoto Univ.···S843

10 : 55 ~ 11 : 30	Poster presentation 38 TKA & UKA	Moderator K. Michishita
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- 3-Po-112 Temporal changes in joint awareness after medial UKA and opening-wedge high tibial osteotomy: A propensity-matched comparative study
*Masafumi Itoh, et al.*, Dept. of Orthop. Surg., Tokyo Women's Medical Univ.···S844
- 3-Po-113 Association between intraoperative gap and postoperative range of motion in unicompartmental knee arthroplasty*Go Iida, et al.*, Dept. of Orthop. Surg., Tesseikai Neurosurgical Hosp.···S844
- 3-Po-114 Influence of preoperative hamstring contracture on postoperative extension change after total knee arthroplasty*Takao Inokuchi, et al.*, Dept. of Orthop. Surg., Hyogo Prefectural Harima-Himeji General Medical Center···S845
- 3-Po-115 The impact of posterior soft tissue management on flexion gap during TKA
*Shingo Shimozaki, et al.*, Shimozaki Orthop. Clinic···S845
- 3-Po-116 The influence of ABO blood group on blood loss during total knee arthroplasty: Analysis using propensity score matching
*Masato Sonobe, et al.*, Dept. of Orthop. Surg., Toho Univ. Sakura Medical Center···S846
- 3-Po-117 The efficacy of tranexamic acid and hemostatic agent of oxidized regenerated cellulose powder (SURGICELL Powder) in total knee arthroplasty
*Hitoshi Arita, et al.*, Dept. of Orthop. Surg., Juntendo Univ. Nerima Hosp.···S846
- 3-Po-118 The effects of tourniquet procedure in total knee arthroplasty
*Yojiro Niwa, et al.*, Dept. of Orthop. Surg., Chigasaki Municipal Hosp.···S847

14 : 40 ~ 15 : 15	Poster presentation 39 Knee: OA	Moderator S. Kobayashi
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- 3-Po-119 Decreased phase angle in lower limb measured by the bioelectrical impedance is associated with lower limb pain: Bunkyo health study
*Noriaki Mihara, et al.*, Dept. of Orthop., Juntendo Univ.···S848
- 3-Po-120 Body mass index and spinopelvic alignment as predictors of incident knee osteoarthritis: An 8-year longitudinal study of older Japanese women
*Yuki Murakami, et al.*, Dept. of Orthop. Surg., Hamamatsu Univ. School of Medicine···S848
- 3-Po-121 Association between medial proximal tibial eminence and meniscal lesions in patients with knee osteoarthritis*Shinnosuke Hada, et al.*, Dept. of Orthop. Surg., Juntendo Tokyo Koto Geriatric Medical Center···S849
- 3-Po-122 Longitudinal changes in bone morphology and joint line convergence angle in valgus-type knee osteoarthritis
*Tomoki Fujita, et al.*, Dept. of Orthop. Surg., Nagoya Univ. Hosp.···S849
- 3-Po-123 Is obesity a risk factor for knee osteoarthritis?: An exploratory analysis from the Tohoku Medical Megabank community-based cohort study
*Tomokazu Tanita, et al.*, Dept. of Orthop. Surg., Tohoku Univ. Graduate School of Medicine···S850
- 3-Po-124 Prevalence and severity of femoral bone wear in Japanese patients with varus knee osteoarthritis
*Manabu Akagawa, et al.*, Dept. of Orthop. Surg., Akita Univ. Graduate School of Medicine···S850
- 3-Po-125 Micro-computed tomographical and histopathological analyses of medial tibial plateaus from patients with subchondral insufficiency fracture or osteoarthritis of the knee
*Takuya Yamamura, et al.*, Dept. of Orthop., Juntendo Univ.···S851

15 : 30 ~ 16 : 05	Poster presentation 40 Knee: Osteotomy/lower limb alignment/miscellaneous	Moderator K. Goshima
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3-Po-126 Evaluation of the influence of hip alignment on outcomes after high tibial osteotomy
*Kyohei Nakata, et al.*, Dept. of Orthop. Surg., Hiroshima Univ. Hosp.···S852

- 3-Po-127 Relationship between alignment and qualitative changes in articular cartilage after medial open wedge high tibial osteotomy
 *Shuji Nakagawa, et al.*, Dept. of Sports and Para-Sports Medicine,
 Graduate School of Medical Science, Kyoto Prefectural Univ. of Medicine...S852
- 3-Po-128 Comparison of surgical accuracy in double-level osteotomy with and without intraoperative adjustment using an alignment rod *Kei Takahashi, et al.*, Musculoskeletal Science,
 Yokohama City Univ. Graduate School of Medicine...S853
- 3-Po-129 Temporal changes in coronal alignment following double level osteotomy
 *Akira Kawai, et al.*, Dept. of Orthop. Surg., Hyogo Medical Univ...S853
- 3-Po-130 Does preoperative medial meniscus extrusion influence recurrence of varus deformity after high tibial osteotomy? *Hiroshi Takuwa, et al.*, Dept. of Orthop., Shimane Univ...S854
- 3-Po-131 The relationship between hinge position and the incidence of hinge fracture in medial open-wedge distal tibial tuberosity osteotomy
 *Shotaro Ishida, et al.*, Dept. of Orthop. Surg., Tachibana Hosp...S854
- 3-Po-132 Comparative study of the Mikulicz line and the ground reaction force vector during gait on full-length standing radiographs
 *Tetsuro Masuda, et al.*, Dept. of Orthop. Surg., Kumamoto Univ. Hosp...S855

16 : 20 ~ 17 : 00	Poster presentation 41 Ligament & meniscus	Moderator Y. Hashimoto
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- 3-Po-133 Examination of factors associated with psychological factors assessed by JACL-25 one year after anterior cruciate ligament reconstruction
 *Hitoshi Arita, et al.*, Dept. of Orthop., Juntendo Univ...S856
- 3-Po-134 MPFL reconstruction versus augmentation for recurrent patellar dislocation: Indications in adolescent and young adult athletes *Naoki Takemoto, et al.*, Dept. of Orthop. Surg.,
 Graduate School of Medical Sciences, Kanazawa Univ...S856
- 3-Po-135 Higher medial meniscus coverage ratio of the medial tibial cartilage in male than in female subjects with KL 0 knees
 *Atsushi Sasabe, et al.*, Center for Stem Cell and Regenerative Medicine,
 Institute of Science Tokyo...S857
- 3-Po-136 PRP injection into the MCL bursa for primary knee osteoarthritis with medial meniscus lesions: A prospective study *Takaya Ohtaki, et al.*, Dept. of Orthop., Juntendo Univ...S857
- 3-Po-137 Evaluation of lower limb alignment in patients with discoid lateral meniscus (DLM)
 *Naoto Furuya, et al.*, Dept. of Orthop. Surg., Hiroshima Univ. Hosp...S858
- 3-Po-138 Longitudinal MRI changes in the preserved meniscal portion after saucerization and suture repair for discoid lateral meniscus
 *Toshihiro Seki, et al.*, Dept. of Orthop. Surg., Yamaguchi Univ. Graduate School of Medicine...S858
- 3-Po-139 Evaluation of coronal plane alignment in the patients with discoid lateral meniscus cases
 *Naoto Date, et al.*, Dept. of Orthop. Surg., Kagawa Univ. Hosp...S859
- 3-Po-140 Clinical outcomes of OATS for knee OCD with synovium-sutured donor site repair evaluated by MRI
 *Yutaka Fujita, et al.*, Div. of Orthop. Surg., Dept. of Regenerative and Transplant Medicine,
 Niigata Univ. Graduate School of Medical and Dental Sciences...S859

17 : 10 ~ 17 : 45	Poster presentation 42 Pain	Moderator K. Inage
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- 3-Po-141 The need for a multidimensional approach to pain management in patients with shoulder contracture
 *Masashi Izumi, et al.*, Rehabilitation Center, Kochi Medical School Hosp...S860
- 3-Po-142 Canceled

- 3-Po-143 Analgesic prescribing trends in Japan (2014 vs. 2022): NDB open data-based trend analysis
 *Tomonori Tetsunaga, et al.*, Dept. of Musculoskeletal Health Promotion,
 Faculty of Medicine, Dentistry and Pharmaceutical Sciences, Okayama Univ.···S861
- 3-Po-144 A comparative study of hip-referred pain before and after total hip arthroplasty
 *Gai Eto, et al.*, Dept. of Orthop. Surg., Japanese Fukuoka Red Cross Hosp.···S861
- 3-Po-145 Effects of preoperative administration of tranexamic acid alone on postoperative inflammation
 and pain in total hip arthroplasty via anterior approach
 *Fumihiko Mukasa, et al.*, Dept. of Orthop., Juntendo Univ.···S862
- 3-Po-146 The relationship between being a night owl and lower back pain: A cross-sectional analysis of
 the Aichi prefecture occupational cohort
 *Mika Matsunaga, et al.*, Dept. of Orthop. Surg., Fujita Health Univ.···S862
- 3-Po-147 Recalibrating the red-flag age criterion in low back pain: Evidence from Japan's
 super-aging society *Saori Soeda, et al.*, Dept. of Orthop.,
 Institute of Biomedical Sciences, Tokushima Univ. Graduate School···S863

3rd Day May 23 e-Poster Booth 1

9 : 15 ~ 9 : 50	e-Poster presentation (English) 43 Sports and trauma	Moderator G. Mitani
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- 3-DP-1 Canceled
- 3-DP-2 Characteristics of sports injuries in 7-22-year-old Japanese badminton athletes
 *Xiao Zhou, et al.*, School of Physical Education,
 Huazhong Univ. of Science and Technology, Wuhan, China···S864
- 3-DP-3 Development and internal validation of clinical prediction model for long-term walking
 impairment in hip fracture patients: ACT score
 *Takahiro Inui, et al.*, Dept. of Orthop. Surg., Teikyo Univ.···S865
- 3-DP-4 Pathological formation of subcoracoid bursa effusion on magnetic resonance imaging studies
 *Daisuke Nakai, et al.*, Faculty of Nursing, Shikoku Univ.···S865
- 3-DP-5 Risk factors of the anchor drill perforation in arthroscopic hip labrum preservation surgery
 *Kazuki Yamada, et al.*, Dept. of Orthop. Surg., Okayama Univ. Hosp.···S866
- 3-DP-6 Canceled
- 3-DP-7 Fencing injuries which required medical time-out during bout are deferent among disciplines:
 Analysis of 35,195 fencers
 *Shuichi Nakayama, et al.*, Dept. of Orthop. Surg., Tokyo Teishin Hosp.···S867

10 : 05 ~ 10 : 40	e-Poster presentation (English) 44	Moderator H. Nakarai
Spine, pediatrics, and medicals safety		

- 3-DP-8 Predicting surgical site infections in spine surgery: Association of postoperative
 lymphocyte reduction
 *Akiyoshi Miyamoto, et al.*, Dept. of Orthop. Surg., Okayama Rosai Hosp.···S868
- 3-DP-9 Canceled
- 3-DP-10 Canceled
- 3-DP-11 Cost-effectiveness of early implant switching triggered by device safety signals in hip and
 knee arthroplasty
 *Rosdiana Rosdiana*, Health Economics Group, Nusantara Young Minds, Jakarta, Indonesia···S869
- 3-DP-12 Outcome of transforaminal lumbar interbody debridement and fusion (TLIDF) with posterior
 instrumentation and spinal fusion in cases of infective spondylodiscitis
 *Shahzaib Riaz Baloch*, Dept. of Orthop. & Spine Surg., Dr. Zia Hosp., Karachi, Pakistan···S870

- 3-DP-13 Full-endoscopic discectomy and thermal annuloplasty for the patients with discogenic low back pain: Motion-preservation spine surgery under local anesthesia
 *Fumitake Tezuka, et al.*, Dept. of Orthop., Tokushima Univ.··S870
- 3-DP-14 Obesity and hypoalbuminemia were the risk factors for surgical site infection in palliative surgery for spinal metastasis *Jirachote Prachanun, et al.*, Dept. of Orthop. Surg., Srinagarind Hosp., Faculty of Medicine, Khon Kaen Univ., Khon Kaen, Thailand··S871

10 : 55 ~ 11 : 30	e-Poster presentation (English) 45	Knee joints 1	Moderator K. Matsumoto
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- 3-DP-15 An updated systematic review and meta-analysis of peroneus longus tendon versus hamstring tendon autografts for the anterior cruciate ligament reconstruction
 *Rajesh K. Rajnish, et al.*, Dept. of Orthop., AIIMS, Jodhpur, India··S872
- 3-DP-16 Canceled
- 3-DP-17 A three-plane framework for describing native knee alignment: Development of the 3PAK classification
 *Manabu Akagawa, et al.*, Dept. of Orthop. Surg., Akita Univ. Graduate School of Medicine··S873
- 3-DP-18 Preserved knee kinematics at 10+ years after anatomic ACL reconstruction with quadriceps autograft
 *Koji Nukuto, et al.*, Dept. of Orthop. Surg., Kobe Univ. Graduate School of Medicine··S873
- 3-DP-19 Gender difference in distribution of CPAK Types in Han Chinese patients with osteoarthritis of the knee
 *Fan Zhang*, Dept. of Orthop. Surg., Affiliated Hosp. of Xuzhou Medical Univ., Xuzhou, China··S874
- 3-DP-20 Longitudinal T2 mapping MRI of meniscal changes after high tibial osteotomy: Predominantly in the medial meniscus *Satomi Abe, et al.*, Dept. of Orthop. Surg., Asahikawa Medical Univ.··S874
- 3-DP-21 Intra-individual comparison of knee kinematics across three inserts in total knee arthroplasty: BCS vs. medial dish vs. deep dish
 *Takatoshi Morooka, et al.*, Dept. of Orthop. Surg., Nishinomiya Kaisei Hosp.··S875

14 : 40 ~ 15 : 15	e-Poster presentation (English) 46	Hip joints	Moderator N. Kobayashi
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- 3-DP-22 Total hip arthroplasty by direct anterior approach for the treatment of ankylosed hips
 *Linjie Hao*, Dept. of Joint Surg., Honghui Hosp., Xian Jiaotong Univ., Xian, China··S876
- 3-DP-23 Revision total hip arthroplasty using a bipolar head & enhanced stability liner results in excellent postoperative stability
 *Colin G. Murphy, et al.*, Dept. of Orthop. Surg., Galway Univ. Hosp., Galway, Ireland··S876
- 3-DP-24 Shortening osteotomy through lesser trochanteric provides excellent outcome in THA for patients with Crowe Type IV dysplasia
 *Linjie Hao*, Dept. of Joint Surg., Honghui Hosp., Xian Jiaotong Univ., Xian, China··S877
- 3-DP-25 Comparative study with three-dimensional analysis of initial fixation pattern between taper wedge stem and short fit and fill stem
 *Takuya Nakai, et al.*, Dept. of Orthop. Surg., Nishinomiya Kaisei Hosp.··S877
- 3-DP-26 A retrospective analysis of novel physical examination test for diagnosing iliopsoas impingement after THA *Maisa S. Namba, et al.*, Dept. of Orthop. Surg., Kanazawa Univ. Hosp.··S878
- 3-DP-27 Canceled
- 3-DP-28 Incidence of osteonecrosis of the femoral head in 126 patients with their first glucocorticoid therapy: A 5-year prospective cohort study
 *Chang Jiang, et al.*, Shanghai Clinical Research and Trials Center, Shanghai Tech Univ., Shanghai, China··S879

15 : 30 ~ 16 : 05 e-Poster presentation (English) 47 Knee joints 2 Moderator T. Watanabe

- 3-DP-29 Peroneal nerve pre-release prevents peroneal nerve palsy in total knee arthroplasty for severe valgus deformity
 *Yusuke Nakagawa, et al.*, Dept. of Orthop. Surg., Institute of Science Tokyo Hosp. ...S880
- 3-DP-30 No correlation between quadriceps tendon alignment and short-term outcomes following kinematic alignment total knee arthroplasty
 *Manabu Akagawa, et al.*, Dept. of Orthop. Surg., Akita Univ. Graduate School of Medicine ...S880
- 3-DP-31 Comparative analysis of the immediate post-operative outcomes between conventional and imageless robotic assisted TKA
 *Sanjay B. Londhe, et al.*, Dept. of Orthop., Criticare Asia Hosp., Malad West, Mumbai, India ...S881
- 3-DP-32 Bone resection accuracy in TKA using an augmented reality navigation system
 *Atsushi Sato, et al.*, Dept. of Orthop. Surg., Fujigaoka Hosp., Showa Medical Univ. ...S881
- 3-DP-33 Is possible sarcopenia useful in predicting the recovery outcomes in patients with total knee replacement? *Kejing Eunice Xiao, et al.*, Div. of Joint Replacement Surg., Dept. of Orthop. and Traumatology, The Univ. of Hong Kong, Hong Kong, China ...S882
- 3-DP-34 Intraoperative passive-flexion kinematics and patient-reported outcome (PROMs) after TKA for valgus knees *Takatoshi Morooka, et al.*, Dept. of Orthop. Surg., Nishinomiya Kaisei Hosp. ...S882
- 3-DP-35 Kinematic vs. mechanical alignment in TKA: What lasts beyond the early years?: A systematic review and meta-analysis
 *Abdelrahman A. Mohamed, et al.*, Faculty of Medicine, October 6 Univ., Giza, Egypt ...S883

16 : 20 ~ 16 : 55 e-Poster presentation (English) 48 Moderator K. Yano
 Foot and ankle, rheumatic diseases, and tumor

- 3-DP-36 Canceled
- 3-DP-37 Long-term outcomes of total hip and knee arthroplasty in patients with juvenile idiopathic arthritis *Takaki Nagase, et al.*, Dept. of Orthop. Surg., Shinjo Hosp. ...S884
- 3-DP-38 ChatGPT-4 cannot provide accurate answers regarding ankle cartilage surgical procedures compared to consensus statements developed by foot and ankle experts
 *Takuji Yokoe, et al.*, Div. of Orthop. Surg., Dept. of Medicine of Sensory and Motor Organs, Faculty of Medicine, Univ. of Miyazaki ...S885
- 3-DP-39 Optimal direction of anchor insertion in lateral ankle ligament repair based on bone quality of distal fibula *Masashi Nakamura, et al.*, Dept. of Orthop. Surg., Hyogo Medical Univ. ...S885
- 3-DP-40 Circulated cooperation of the hospital and polyclinic for rheumatoid arthritis treatment in Yamagata over 11 years: YARANNA network
 *Harunori Mori, et al.*, Dept. of Orthop. Surg., Yamagata Univ. ...S886
- 3-DP-41 Minimally invasive distal linear metatarsal osteotomy with K-wire fixation to medial cuneiform for hallux valgus: Early weightbearing results
 *Yoshiharu Shimozone, et al.*, Dept. of Orthop. Surg., Graduate School of Medicine, Kyoto Univ. ...S886
- 3-DP-42 Quantity of lower muscle as a promising prognostic factor for overall survival in patients with bone and soft tissue sarcoma
 *Tadashi Iwai, et al.*, Dept. of Orthop. Surg., Yodogawa Christian Hosp. ...S887

17 : 10 ~ 17 : 45 e-Poster presentation 49 Clinical safety & education Moderator S. Mitsuhashi

- 3-DP-43 Learning curve and CUSUM analysis of the interlaminar approach in full-endoscopic spine surgery: A phase-specific evaluation *Takeshi Kaneko, et al.*, Inanami Spine and Joint Hosp. ...S888
- 3-DP-44 Investigation of intraoperative radiation time and its related factors in trochanteric femoral fractures *Hayato Ito, et al.*, Dept. of Orthop. Surg., Nagasaki Medical Center ...S888

- 3-DP-45 Current situation of patient autonomy in severe cervical spinal cord injury: Experience at our hospital*Hiroshi Fukuoka, et al.*, Dept. of Orthop. Surg., Toyohashi Municipal Hosp.···S889
- 3-DP-46 Investigation and in-hospital initiatives regarding child fractures of unknown mechanism occurring during hospitalization at our institution*Naoya Taki, et al.*, Dept. of Pediatric Orthop. Surg., Jichi Children's Medical Center···S889
- 3-DP-47 The role of orthopaedic surgeons in the medical safety system of cancer specialty hospitals*Eisuke Kobayashi*, Dept. of Musculoskeletal Oncology, National Cancer Center Hosp.···S890
- 3-DP-48 Considering the current state of nursing care shoe use at our hospital*Yui Akiyama, et al.*, Nararesugi Hosp.···S890
- 3-DP-49 Medical safety in orthopaedic medical institutions: A clinical study for disclosure of medical records*Keizo Morikawa*, Morikawa Orthop. Practice···S891

3rd Day May 23 e-Poster Booth 2

9 : 15 ~ 9 : 50 e-Poster presentation 50 Pelvic and acetabular fracture Moderator M. Yoshida

- 3-DP-50 Evaluation of postoperative patient-reported outcomes in acetabular fracture patients*Tatsuya Nobori*, Dept. of Orthop. Surg., Yokkaichi Municipal Hosp.···S892
- 3-DP-51 Frequency and characteristics of delayed diagnosis of fragility fractures of the pelvis*Sungchan Lee, et al.*, Dept. of Orthop. Surg., Kanazawa Hosp.···S892
- 3-DP-52 Clinical outcomes of transiliac rod and screw fixation (TIRF) for pelvic ring fractures in elderly*Yu Fujiwara, et al.*, Dept. of Orthop. Surg., Hyogo Emergency Medical Center···S893
- 3-DP-53 Factors associated with 1-year mortality in fragility fracture of the pelvis: Prospective observational study*Nobutoshi Takamatsu, et al.*, Dept. of Orthop. Surg., Tokushima Prefectural Kaifu Hosp.···S893
- 3-DP-54 Comparison of fracture type classification before and after MRI imaging in fragile pelvic fractures*Mako Okumura, et al.*, Dept. of Orthop. Surg., Kushiro City General Hosp.···S894
- 3-DP-55 Changes of postoperative bone mineral density in fragility fractures of the pelvis: Artificial intelligence-based CT analysis*Junya Kondo, et al.*, Dept. of Orthop. Surg., Fukuyama City Hosp.···S894
- 3-DP-56 Admission factors predicting intraoperative blood loss in pelvic ring fractures: Statistical vs. clinical models*Kentaro Sato, et al.*, Dept. of Orthop. Surg., St. Marianna Univ. School of Medicine···S895

10 : 05 ~ 10 : 40 e-Poster presentation 51 Hip fracture 1: Fracture liaison service/treatment system Moderator K. Shigemoto

- 3-DP-57 The effect of orthogeriatric co-management for hip fracture*Toshikazu Yoshikawa, et al.*, Sano Kosei General Hosp.···S896
- 3-DP-58 The current situation and problems for femoral proximal fracture continuous management charge of secondary fracture prevention at our hospital*Yuriyo Matsui, et al.*, Dept. of Orthop. Surg., Kuwana City Medical Center···S896
- 3-DP-59 Current status of early surgical intervention and management of osteoporotic fracture prevention through OLS activities for proximal femoral fracture patients*Tsuyoshi Kato, et al.*, Dept. of Orthop. Surg., Ome Medical Center···S897
- 3-DP-60 Impact of physician work style reforms on the waiting period for surgery for proximal femur fractures*Hiroaki Murakami, et al.*, Dept. of Orthop. Surg., Hiroshima Citizens Hosp.···S897
- 3-DP-61 Association between preoperative waiting time and hospital stay in older adults with hip fractures*Keigo Izumi, et al.*, Dept. of Orthop. Surg., Fujita Health Univ.···S898

- 3-DP-62 In femoral trochanteric fracture patients, swallowing impairment is linked to pneumonia, longer hospitalization, and reduced discharge mobility
 *Yoshiharu Sugiyama, et al.*, Dept. of Orthop. Surg., Shizuoka City Shizuoka Hosp. ...S898
- 3-DP-63 Analysis of factors associated with surgical delay for older adults with hip fractures
 *Kenta Zouchi, et al.*, Dept. of Orthop. Surg., Fujita Health Univ. ...S899

10 : 55 ~ 11 : 30	e-Poster presentation 52	Moderator S. Isefuku
Hip fracture 2: Nutrition and prognosis		

- 3-DP-64 Evaluation of the usefulness of nutritional indicators in the prognosis of proximal femoral fractures
 *Shu Yamazaki, et al.*, Dept. of Orthop. Surg., Faculty of Medicine and Graduate School of Medicine, Hokkaido Univ. ...S900
- 3-DP-65 Bone metabolic characteristics and outcomes of complex trochanteric femoral fractures
 *Masashi Fujii, et al.*, Dept. of Orthop. Surg., Akita City Hosp. ...S900
- 3-DP-66 Investigation of factors complicating fracture types of proximal femoral fractures involving fracture lines in the subcapital area
 *Shun Igarashi, et al.*, Omori Municipal Hosp. ...S901
- 3-DP-67 Differences in bone mineral density distribution may affect fracture type in proximal femoral neck fractures
 *Kenji Hisa*, Dept. of Orthop. Surg., Ina Central Hosp. ...S901
- 3-DP-68 Ninjin'yoeito as a chrononutritional intervention: Effects on nutritional status and activities of daily living in postoperative patients with hip fractures
 *Takuji Matsumoto, et al.*, Dept. of Orthop. Surg., Nokami Kosei General Hosp. ...S902
- 3-DP-69 Risk factors for early mortality after hemiarthroplasty for femoral neck fracture
 *Junya Shimizu, et al.*, Dept. of Orthop. Surg., Sapporo Medical Univ. ...S902
- 3-DP-70 Association of remaining teeth with oral health, nutritional status, and cognitive function in patients with proximal femoral fracture
 *Yuji Matsuno*, Dept. of Orthop. Surg., Hamamatsu Medical Center ...S903

14 : 40 ~ 15 : 15	e-Poster presentation 53	Moderator S. Kitada
Hip and femoral fracture 1: Treatment		

- 3-DP-71 Prevalence and outcomes of subcapital fractures among nondisplaced femoral neck fractures
 *Takashi Iwakura, et al.*, Dept. of Orthop. Surg., Sanda City Hosp. ...S904
- 3-DP-72 Effectiveness of augmentation screws in preventing loss of reduction in valgus-impacted femoral neck fracture
 *Hitoshi Hirase, et al.*, Dept. of Orthop. Trauma Center, Hyogo Prefectural Nishinomiya Hosp. ...S904
- 3-DP-73 The plasticity of the femoral head center in BHA by superior approach
 *Yohei Kagawa, et al.*, Dept. of Orthop. Surg., Tamashima Central Hosp. ...S905
- 3-DP-74 Results of hemiarthroplasty combined with osteosynthesis for unstable intertrochanteric femoral fractures
 *Shu Tagawa, et al.*, Dept. of Orthop. Surg., Japanese Fukuoka Red Cross Hosp. ...S905
- 3-DP-75 Is surgery necessary for occult femoral trochanteric fractures?
 *Takanori Sakaki, et al.*, Dept. of Orthop. Surg., Miyazaki Medical Association Hosp. ...S906
- 3-DP-76 The combination of exchange nailing and augmentation plating is an effective surgical strategy for subtrochanteric atypical femoral fracture nonunion
 *Kunihiko Arakawa, et al.*, Trauma and Reconstruction Center, Teikyo Univ. Hosp. ...S906
- 3-DP-77 Osteosynthesis using short femoral nail for undisplaced femoral neck fractures
 *Yoshiyuki Akasaka, et al.*, Dept. of Orthop. Surg., Kanto Central Hosp. ...S907

15 : 30 ~ 16 : 05 e-Poster presentation 54

Moderator Y. Irie

Hip and femoral fracture 2: Treatment

- 3-DP-78 Predicting perioperative delirium in fragility fracture patients: A risk score incorporating fracture site *Saori Motegi, et al.*, Dept. of Orthop. Surg., Teikyo Univ. ...S908
- 3-DP-79 Appropriate use of preoperative assessment tools for femoral trochanteric fractures and analysis of their usefulness in clinical practice *Yasutaka Nishiyama, et al.*, Dept. of Orthop. Surg., Mitoyo General Hosp. ...S908
- 3-DP-80 Risk factors in patients with bilateral proximal femoral fractures: A propensity score-matched comparison with unilateral cases *Gai Eto, et al.*, Dept. of Orthop. Surg., Japanese Fukuoka Red Cross Hosp. ...S909
- 3-DP-81 A study of cases of subsequent contralateral hip fractures *Atsuhisa Yamada, et al.*, Dept. of Orthop. Surg., Teikyo Univ. Hosp., Mizonokuchi/Teikyo Univ. Hosp. ...S909
- 3-DP-82 Early surgery within 48 hours for hip fractures does not improve 1-year mortality: A retrospective cohort study of 234 patients *Masatoshi Minami, et al.*, Dept. of Orthop. Surg., Konan Medical Center ...S910
- 3-DP-83 Distal advanced locking screw loosening in femoral shaft fractures treated with the T2 ALPHA Femoral GT Nail *Keitaro Tada, et al.*, Dept. of Orthop. Surg., Hyogo Emergency Medical Center ...S910
- 3-DP-84 Our hospital's fracture liaison service initiative: The impact of "hip" on "non-hip" fractures *Kazuto Hirai, et al.*, Dept. of Orthop. Surg. and Sport Medicine, Kawasaki Medical School ...S911

16 : 20 ~ 16 : 55 e-Poster presentation 55 Lower limb trauma

Moderator K. Taguchi

- 3-DP-85 Template reduction of fibular fracture with anatomical posterolateral locking plate: A technical tip *Tomoaki Kurashige, et al.*, Dept. of Orthop. Surg., Teikyo Univ. ...S912
- 3-DP-86 Association between preoperative delay and surgical site infection in operative treatment of ankle fractures *Daisuke Hirano, et al.*, Dept. of Orthop. Surg., Kyushu Central Hosp. ...S912
- 3-DP-87 Laterally displaced posterior malleolar fragments contribute to syndesmotric stability *Kazuo Sato, et al.*, Dept. of Orthop. Trauma, Sapporo Higashi Tokushukai Hosp. ...S913
- 3-DP-88 Reduction methods in intramedullary nailing for distal fibular fractures: A scoping review *Ion Kimura, et al.*, Dept. of Orthop. Surg., Ageo Central General Hosp. ...S913
- 3-DP-89 Bone reconstruction cases with Masquelet method for Gastilo 3B Tibia open fracture *Yuta Hayashi, et al.*, Dept. of Musculoskeletal Traumatology and Reconstructive Surg., Graduate School of Biomedical and Health Sciences, Hiroshima Univ. ...S914
- 3-DP-90 Efficacy of supplemental fixation for inferior pole patellar fractures: A multicenter retrospective study (TRON study) *Masato Okawa, et al.*, Dept. of Orthop. Surg., Anjo Kosei Hosp. ...S914
- 3-DP-91 Timing of meniscus repair for complex ligament injuries requiring second-stage surgery *Katsuhiro Yoshida, et al.*, Dept. of Orthop. Surg., Fujita General Hosp. ...S915

17 : 10 ~ 17 : 45 e-Poster presentation 56 Pediatric orthopaedics 1

Moderator K. Okada

- 3-DP-92 Functional movement screen and Kodomo Locomo Assessment in school-aged children: A basis for fracture risk prediction *Tomoo Nakagawa, et al.*, Dept. of Orthop. Surg., Higashikawaguchi Hosp. ...S916
- 3-DP-93 The effect of non-weight-bearing conservative treatment on bone mineral content and body composition in patients with Legg-Calvé-Perthes disease *Hiyuma Kaga, et al.*, Dept. of Orthop. Surg., Hokkaido Medical Center for Child Health and Rehabilitation ...S916

- 3-DP-94 Clinicopathological assessment of cancer testis antigens NY-ESO-1/MAGE-A4 in osteosarcoma
*Kazuhiko Hashimoto, et al.*, Dept. of Orthop. Surg., Kindai Univ. Hosp.···S917
- 3-DP-95 Incidence trends of Perthes disease in a super-aged, depopulating region: A 20-year study in Akita prefecture
*Yo Morishita, et al.*, Dept. of Orthop. Surg., Akita Univ. Graduate School of Medicine···S917
- 3-DP-96 Delay in diagnosis of slipped capital femoral epiphysis and associated factors
*Yasunari Kamiya, et al.*, Dept. of Orthop. Surg., Aichi Children's Health and Medical Center···S918
- 3-DP-97 Risk factors for fractures in extremely low birth weight infants during NICU (neonatal intensive care unit) hospitalization
*Kumiko Yotsuya, et al.*, Dept. of Orthop. Surg., Hamamatsu Univ. School of Medicine···S918
- 3-DP-98 Factors associated with inconvenience at home in adult patients with achondroplasia
*Masaki Matsushita, et al.*, Dept. of Orthop./Rheumatology,
 Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine,
 Graduate School of Medicine, Nagoya Univ.···S919

3rd Day May 23 e-Poster Booth 3

9 : 15 ~ 9 : 50 e-Poster presentation 57 THA 3 Moderator T. Hayama

- 3-DP-99 Effect of preserving pelvic iliofemoral ligament attachment on soft tissue balance in posterior total hip arthroplasty approach*Toshihiko Hara, et al.*, Dept. of Orthop. Surg., Iizuka Hosp.···S920
- 3-DP-100 Changes in stabilization of hip external rotation and traction before and after cutting of the vertical component of iliofemoral ligament
*Hiroaki Murakami, et al.*, Dept. of Orthop. Surg., Hiroshima Citizens Hosp.···S920
- 3-DP-101 A wireless intraoperative joint force sensing system for total hip arthroplasty
*Hiromasa Tanino, et al.*, Dept. of Orthop. Surg., Asahikawa Medical Univ.···S921
- 3-DP-102 Effect of capsular reconstruction versus resection on perioperative outcomes in THA
*Kentaro Iwakiri, et al.*, Dept. of Orthop. Surg., Shiraniwa Hosp.···S921
- 3-DP-103 Evaluation of intraoperative hip stability before and after iliofemoral ligament vertical band resection in total hip arthroplasty
*Masashi Kondo, et al.*, Dept. of Orthop. Surg., Kochi Medical School Hosp.···S922
- 3-DP-104 Preservation of soft tissue in the direct anterior approach with curved short stem optimys
*Akio Kanda, et al.*, Dept. of Orthop. Surg., Juntendo Univ. Shizuoka Hosp.···S922
- 3-DP-105 Association between preoperative phase angle and postoperative physical function in patients undergoing total hip arthroplasty
*Shota Oda, et al.*, Rehabilitation Center, Kochi Medical School Hosp.···S923

10 : 05 ~ 10 : 45 e-Poster presentation 58 THA 4 Moderator T. Tanaka

- 3-DP-106 Fifteen years' follow-up study after cemented THA with acetabular impaction bone grafting for large segmental bone defects in dysplastic hips
*Toshiki Iwase, et al.*, Dept. of Orthop. Surg., Hamamatsu Medical Center···S924
- 3-DP-107 Long-term outcomes and associated factors following revision total hip arthroplasty using a cross-shaped acetabular reinforcement plate
*Shinnosuke Goshō, et al.*, Dept. of Endoprosthetic Surg., Oita Univ.···S924
- 3-DP-108 Chronological changes in CT values after acetabular allografting in THA: A comparison of bulk allograft and impaction bone grafting
*Itaru Kachi, et al.*, Dept. of Orthop. Surg., Showa Medical Univ. Fujigaoka Hosp.···S925

- 3-DP-109 Short-term results of total hip arthroplasty and revision surgery with the Burch-Schneider reinforcement cage
 *Yuki Hirano, et al.*, Div. of Orthop. Surg., Dept. of Regenerative and Transplant Medicine, Niigata Univ. Graduate School of Medical and Dental Sciences...S925
- 3-DP-110 Postoperative outcomes of total hip arthroplasty with acetabular reconstruction using the Burch-Schneider reinforcement cage
 *Tetsuo Hayama, et al.*, Dept. of Orthop. Surg., The Jikei Univ. School of Medicine...S926
- 3-DP-111 The relationship between the time course of lateral femoral cutaneous nerve palsy caused by Bikini incision DAA-THA and patient satisfaction
 *Takehiro Kawakami, et al.*, Dept. of Orthop. Surg., Yamaguchi Prefectural Grand Medical Center...S926
- 3-DP-112 Preoperative factors related to hidden blood loss in primary total hip arthroplasty
 *Satoshi Takayanagi, et al.*, Dept. of Orthop. Surg., Shonan Kamakura Joint Reconstruction Center...S927
- 3-DP-113 Timing of sports resumption after THA: A study of gait function measured with muscle strength meter and smartphone app
 *Masahiko Mihara, et al.*, Shonan Kamakura Joint Reconstruction Center...S927

10 : 55 ~ 11 : 30	e-Poster presentation 59 Pain	Moderator H. Hashizume
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- 3-DP-114 Characteristics of physical findings associated with neuropathic pain in shoulder disorders
 *Shogo Sugawara, et al.*, Dept. of Orthop. Surg., Tohoku Univ. Graduate School of Medicine...S928
- 3-DP-115 Usefulness of exercise facilitation method using cognitive behavioral therapy tools for improving sleep in patients with chronic low back pain
 *Motohiro Kawasaki, et al.*, Pain Management Center, Shikoku Medical Center for Children and Adults...S928
- 3-DP-116 Effects of therapeutic agents on central sensitization and adverse event in lumbar-origin lower limb neuropathic pain: A multicenter prospective study
 *Sadayuki Ito, et al.*, Dept. of Orthop./Rheumatology, Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine, Graduate School of Medicine, Nagoya Univ....S929
- 3-DP-117 Comparison of postoperative wound pain between UBE and MEDL
 *Shima Hirai*, Dept. of Orthop. Surg., Sagamihara National Hosp....S929
- 3-DP-118 Prevalence and characteristics of neuropathic pain and nociplastic pain in patients with knee osteoarthritis *Mitsuhiko Kubo, et al.*, Dept. of Sports and Musculoskeletal Medicine, Shiga Univ. of Medical Science...S930
- 3-DP-119 Efficacy of periarticular injection with multimodal medications in total hip arthroplasty
 *Teruaki Hashimoto, et al.*, Dept. of Orthop. Surg., Kindai Univ. Hosp....S930
- 3-DP-120 The treatment of chronic musculoskeletal pain at hip joint clinics
 *Hiroaki Kijima, et al.*, Dept. of Orthop. Surg., Akita Univ. Graduate School of Medicine...S931

14 : 40 ~ 15 : 15	e-Poster presentation 60 Sports: Lumbar spine	Moderator M. Hangai
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- 3-DP-121 Adult-onset acute lumbar spondylolysis: Clinical features and etiological background in elite athletes *Jun Shiozawa, et al.*, Dept. of Sports Medicine, Juntendo Univ. School of Sports and Health Science...S932
- 3-DP-122 Diagnostic reliability of MR bone imaging in staging lumbar spondylolysis in adolescents: Can MR bone imaging replace CT?
 *Kohei Okuyama, et al.*, Dept. of Orthop. Surg., Nishikawa Orthop. Clinic...S932
- 3-DP-123 Imaging factors associated with return-to-play duration in baseball players with lumbar spondylolysis *Naotaka Mamizuka, et al.*, Baseball & Sports Clinic...S933

- 3-DP-124 Pre-MRI factors (predictors) for the diagnosis of spondylolysis in teenage athletes
*Nobuhiro Chikaishi, et al.*, Oonishi Orthop. Sports Clinic...S933
- 3-DP-125 Prevalence of Bastrup's disease and association with sports history in pediatric athletes:
 An MRI-based study*Shutaro Fujimoto, et al.*, Dept. of Orthop. Surg., Sapporo Medical Univ...S934
- 3-DP-126 Association of playing position with lumbar disc degeneration and spinopelvic alignment in
 collegiate baseball players*Kyosuke Numaguchi*, Dept. of Orthop. Surg.,
 Faculty of Medicine and Graduate School of Medicine, Hokkaido Univ...S934
- 3-DP-127 A 10.8° threshold of maximal facet tropism predicts lumbar disc herniation in young athletes
*Takayuki Kitahara, et al.*, Dept. of Orthop.,
 Institute of Biomedical Sciences, Tokushima Univ. Graduate School...S935

15 : 30 ~ 16 : 05	e-Poster presentation 61 Sports: Miscellaneous	Moderator K. Watanabe
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- 3-DP-128 Clinical characteristics of lateral meniscus oblique radial tear (LMORT) combined with anterior
 cruciate ligament injuries
*Yasutaka Tashiro, et al.*, Dept. of Orthop. Surg., Kyushu Rosai Hosp...S936
- 3-DP-129 Relationship between the viscoelasticity of the vastus lateralis and its rapid force generation:
 A study using ultrasound shear wave imaging
*Risa Adachi, et al.*, Graduate School of Health Sciences, Sapporo Medical Univ...S936
- 3-DP-130 Biomechanical characteristics of cutting maneuvers in female handball players classified by
 knee abduction moment
*Yusuke Kamatsuki, et al.*, Dept. of Orthop. Surg., Okayama Saiseikai General Hosp...S937
- 3-DP-131 Assessment of lower-limb range of motion (ROM) and correlation analysis during the
 "six-step": A basic footwork move in Breaking (Breakdance)
*Takashi Tsuda, et al.*, Dept. of Orthop. Surg., Ehime Prefectural Imabari Hosp...S937
- 3-DP-132 Effects of take-off foot angle differences on lower limb joint biomechanics during volleyball
 spike jumps*Makoto Asaeda, et al.*, Dept. of Rehabilitation Medicine, Hiroshima Univ. Hosp...S938
- 3-DP-133 Investigation of factors associated with return to play after hamstring injury: A single-team
 study in Japan Rugby League One
*Taizo Hatano, et al.*, Dept. of Joint Surg. and Sports Medicine,
 Graduate School of Medical and Dental Sciences, Institute of Science Tokyo...S938
- 3-DP-134 Preventive effects of smartphone app-based medical screening on sports injuries
*Hiroaki Kijima, et al.*, Dept. of Orthop. Surg., Akita Univ. Graduate School of Medicine...S939

16 : 20 ~ 16 : 55	e-Poster presentation 62 ACL	Moderator K. Tensho
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- 3-DP-135 Greater anterior tibial subluxation is associated with higher pivot-shift grade and steeper
 posterior tibial slope in ACL injured knees
*Toshiharu Takami, et al.*, Dept. of Orthop. Surg., Kobe Univ. Graduate School of Medicine...S940
- 3-DP-136 Impact of knee flexion angle on anterior tibial subluxation assessed using weight-bearing lateral
 radiographs in ACL-injured knees: Chiba LEAF study
*Tsuyoshi Hamada, et al.*, Dept. of Orthop. Surg., Graduate School of Medicine, Chiba Univ...S940
- 3-DP-137 Relationships of the anterior tibial subluxation and meniscal bone angle of the anterior cruciate
 ligament injured and contralateral non-injured knee
*Sora Koiwa, et al.*, Dept. of Orthop. Surg., The Univ. of Tokyo Hosp., The Univ. of Tokyo...S941
- 3-DP-138 Clinical outcome of ACLR for old ACL injury: Comparison with fresh ACL injury by propensity
 score matching
*Takashi Hoshino, et al.*, Clinical Center for Sports Medicine and Sports Dentistry,
 Institute of Science Tokyo...S941

- 3-DP-139 Graft shift of the quadriceps tendon: A comparison between round and rounded rectangular tunnels *Manase Nishimura, et al.*, Dept. of Orthop. Surg., Graduate School of Medical Sciences, Kanazawa Univ. ...S942
- 3-DP-140 Growth disturbance of anterior cruciate ligament reconstruction in patients with open epiphyseal using the over-the-top route technique *Koji Takeda, et al.*, Dept. of Orthop. Surg., Hiroshima Univ. Hosp. ...S942
- 3-DP-141 Association of judo throwing techniques and surgical delay with meniscal and cartilage injuries in primary ACL reconstruction *Yudai Morita, et al.*, Div. of Orthop. Surg., Dept. of Medicine of Sensory and Motor Organs, Faculty of Medicine, Univ. of Miyazaki ...S943

17 : 10 ~ 17 : 45	e-Poster presentation 63 Sports: Upper limb	Moderator A. Tasaki
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- 3-DP-142 Association between isometric strength of forearm flexor-pronator muscles and medial elbow instability in high school baseball pitchers *Shinsuke Arisawa, et al.*, Dept. of Orthop. Surg., Gunma Univ. Graduate School of Medicine ...S944
- 3-DP-143 Risk for shoulder and elbow injury in left-handed high school baseball pitchers: A prospective cohort study *Hitoshi Shitara, et al.*, Dept. of Orthop. Surg., Gunma Univ. Graduate School of Medicine ...S944
- 3-DP-144 Development of cadaveric models of an anterior shoulder laxity and kinematics changes *Jumpei Inoue, et al.*, Dept. of Orthop. Surg., Nagoya Tokushukai General Hosp. ...S945
- 3-DP-145 Efficacy of MRI of the shoulder joint in medical examinations of asymptomatic professional baseball players *Kohei Yamaura, et al.*, Dept. of Orthop. Surg., Kobe Univ. Graduate School of Medicine ...S945
- 3-DP-146 Anterior glenohumeral capsular ligament reconstruction for baseball players with traumatic shoulder dislocation on the throwing side *Tadanao Funakoshi, et al.*, Keiyu Orthop. Hosp. ...S946
- 3-DP-147 Clinical outcomes of PRP combined with zinc deficiency therapy for acute complete medial ulnar collateral ligament rupture in baseball player *Naotaka Mamizuka, et al.*, Baseball & Sports Clinic ...S946
- 3-DP-148 Differences in injury patterns among youth baseball players by competitive playing duration: A screening study of 853 players *Toshiki Kamiya, et al.*, Div. of Orthop. Surg., Dept. of Medicine of Sensory and Motor Organs, Faculty of Medicine, Univ. of Miyazaki ...S947

3rd Day May 23 e-Poster Booth 4
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9 : 15 ~ 9 : 50	e-Poster presentation 64 Knee: Meniscus	Moderator Y. Kobayashi
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- 3-DP-149 Ultrasound evaluation of medial meniscus extrusion one year after centralization with medial meniscus posterior root repair *Nobutake Ozeki, et al.*, Center for Stem Cell and Regenerative Medicine, Institute of Science Tokyo ...S948
- 3-DP-150 Diagnostic utility of MRI findings in detecting medial meniscus posterior root tear *Manase Nishimura, et al.*, Dept. of Orthop. Surg., Graduate School of Medical Sciences, Kanazawa Univ. ...S948
- 3-DP-151 Evaluation using MRI of medial meniscus extrusion after only suture surgery for medial meniscus posterior root tear *Michiru Moriya, et al.*, Matsudo Orthop. Hosp. ...S949
- 3-DP-152 Deep learning using static ultrasonographic images predict medial meniscal extrusion during gait *Yosuke Ishii, et al.*, Dept. of Bio-Environmental Adaptation Sciences, Graduate School of Biomedical and Health Sciences, Hiroshima Univ. ...S949
- 3-DP-153 Risk factors for medial meniscus posterior root tear based on coronal and sagittal alignment *Toshiki Kohara, et al.*, Dept. of Orthop. Surg., Okayama Univ. Hosp. ...S950

- 3-DP-154 Duration from injury to MRI and consultation is associated with changes in medial meniscus extrusion following posterior root repair
 *Yuta Morinobu, et al.*, Dept. of Orthop. Surg., Japanese Red Cross Okayama Hosp. ...S950
- 3-DP-155 Effectiveness of MMCFA combined with proximal tibial osteotomy: A study focusing on improvement of meniscal extrusion
 *Yasutoshi Ikeda, et al.*, Dept. of Orthop. Surg., Sapporo Medical Univ. ...S951

10 : 05 ~ 10 : 40	e-Poster presentation 65 Knee: OA 1	Moderator A. Nakajima
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- 3-DP-156 Gait muscle activity according to severity of knee osteoarthritis using an integral value ranking classification
 *Yuki Suzuki, et al.*, Dept. of Orthop. Surg., Faculty of Medicine and Graduate School of Medicine, Hokkaido Univ. ...S952
- 3-DP-157 Positron emission tomography evaluation of skeletal muscle metabolism in knee osteoarthritis: Effects of lateral wedge insole use during walking
 *Kentaro Fujita, et al.*, Dept. of Orthop. Surg., Graduate School of Medical Sciences, Kanazawa Univ. ...S952
- 3-DP-158 Oral hypofunction as an independent factor associated with skeletal muscle index in patients with end-stage knee osteoarthritis
 *Yusuke Horita, et al.*, Dept. of Orthop. Surg., Ehime Univ. Graduate School of Medicine ...S953
- 3-DP-159 Morphological characteristics of patellofemoral cartilage lesions
 *Akinori Nekomoto, et al.*, Dept. of Artificial Joints and Biomaterials, Graduate School of Biomedical and Health Sciences, Hiroshima Univ. ...S953
- 3-DP-160 Transverse-plane abnormalities of lower-extremity alignment affect lateral patellofemoral knee osteoarthritis
 ... *Shigeru Takagi, et al.*, Div. of Orthop. Surg., Dept. of Regenerative and Transplant Medicine, Niigata Univ. Graduate School of Medical and Dental Sciences ...S954
- 3-DP-161 Agreement between ZedKnee 3D-CT automated mLDFA/MPTA and standing long-leg radiographs
 *Takashi Aki, et al.*, Dept. of Orthop. Surg., Tohoku Univ. Hosp. ...S954
- 3-DP-162 Evaluation of the proximal posterior condyle space on AP femur radiographs: Effects of hip flexion, body size, and femoral morphology
 *Hyunho Lee, et al.*, Dept. of Orthop. Surg., Nihon Univ. ...S955

10 : 55 ~ 11 : 30	e-Poster presentation 66 Knee: OA 2	Moderator R. Akagi
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- 3-DP-163 Longitudinal changes in the anatomical lateral distal femoral angle in valgus-type knee osteoarthritis
 *Tomoki Fujita, et al.*, Dept. of Orthop. Surg., Nagoya Univ. Hosp. ...S956
- 3-DP-164 Specific osteophytes in asymptomatic KL-1 knees predict progression into KL-2: A 4-year prospective cohort study
 *Junnosuke Arima, et al.*, Dept. of Orthop. Surg., Graduate School of Medicine, Chiba Univ. ...S956
- 3-DP-165 Dynamics of the medial meniscus extrusion during walking sensitively detect the severity of cartilage lesions in knee joint
 *Yosuke Ishii, et al.*, Dept. of Bio-Environmental Adaptation Sciences, Graduate School of Biomedical and Health Sciences, Hiroshima Univ. ...S957
- 3-DP-166 Knee pain improvement following total hip arthroplasty: A prospective study on frequency, severity, and influencing factors
 *Yugo Morita, et al.*, Dept. of Orthop. Surg., Graduate School of Medicine, Kyoto Univ. ...S957
- 3-DP-167 Radiographic factors influencing knee adduction moment measured by wearable devices
 *Tatsuya Fujii, et al.*, Dept. of Orthop. Surg., Laketown Orthop. Hosp. ...S958
- 3-DP-168 Intraoperative tibial rotation analysis in knee osteoarthritis with valgus alignment
 *Masataka Ota, et al.*, Dept. of Orthop. Surg., Showa Medical Univ. Fujigaoka Hosp. ...S958

3-DP-169 Relationship between the degree of knee osteoarthritis and femoral rotation in weight bearing position*Nobuyuki Kumahashi, et al.*, Dept. of Orthop., Matsue Redcross Hosp.···S959

14 : 40 ~ 15 : 15	e-Poster presentation 67 Knee: Osteotomy 1	Moderator M. Itoh
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3-DP-170 Residual varus alignment is associated with poor clinical outcomes after autologous chondrocyte implantation combined with high tibial osteotomy*Shigeo Yoshida, et al.*, Dept. of Orthop. Surg., Kyoto Shimogamo Hosp.···S960

3-DP-171 Investigation of factors affecting loss of alignment correction in long-term follow-up after OWHTO*Yuta Fujii, et al.*, Dept. of Orthop., Graduate School of Medical Science, Kyoto Prefectural Univ. of Medicine···S960

3-DP-172 Clinical significance of additional cross screws in medial opening-wedge high tibial osteotomy*Chuji Hirota, et al.*, Dept. of Orthop. Surg., Osaka Medical and Pharmaceutical Univ.···S961

3-DP-173 Internal rotation radiographs after OW-DTO are useful for evaluating hinge fractures and gap filling*Yukio Akasaki, et al.*, Dept. of Orthop. Surg., Kyushu Univ. Hosp.···S961

3-DP-174 Ankle coronal alignment and OA progression at mid-term follow-up after opening wedge high tibial osteotomy*Tomotaka Akamatsu, et al.*, Musculoskeletal Science, Yokohama City Univ. Graduate School of Medicine···S962

3-DP-175 Where is the appropriate target for the lateral hinge in open wedge high tibial osteotomy*Kenichi Goshima, et al.*, Dept. of Orthop. Surg., Kanazawa Munehiro Hosp.···S962

3-DP-176 Clinical results of minor correction open wedge distal tuberosity osteotomy for save the meniscus*Genya Mitani, et al.*, Dept. of Orthop. Surg., Samukawa Hosp.···S963

15 : 30 ~ 16 : 05	e-Poster presentation 68 Knee: Osteotomy 2	Moderator T. Nakamura
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3-DP-177 Determinants of gap healing after OWHTO and OWDTO*Toshihiro Seki, et al.*, Dept. of Orthop. Surg., Yamaguchi Univ. Graduate School of Medicine···S964

3-DP-178 Evaluation of prognostic factors in open wedge high tibial osteotomy using preoperative MRI findings*Ami Takahashi, et al.*, Dept. of Orthop. Surg., Faculty of Medicine and Graduate School of Medicine, Hokkaido Univ.···S964

3-DP-179 Outcomes of around knee osteotomy in elderly patients: A comparison with UKA and osteotomy in younger patients*Haruhisa Kanaya, et al.*, Dept. of Orthop. Surg., Tottori Univ.···S965

3-DP-180 Predictors of non-return to preoperative sports level after high tibial osteotomy for medial knee osteoarthritis*Taku Ebata, et al.*, Dept. of Orthop. Surg., Faculty of Medicine and Graduate School of Medicine, Hokkaido Univ.···S965

3-DP-181 Usefulness of additional Sujikai screw fixation for bone union in open wedge distal tuberosity tibial osteotomy*Naoshi Ikegawa, et al.*, Matsudo Orthop. Hosp.···S966

3-DP-182 Does post-OWHTO patellofemoral joint deformation affect patient-reported outcomes?: A 10-year follow-up of 74 knees*Suguru Koyama, et al.*, Dept. of Orthop. Surg., Shinshu Univ.···S966

3-DP-183 The effect of arched high tibial osteotomy on the lateral thrust of knee OA*Kenji Honda, et al.*, Dept. of Orthop. Surg., Saiseikai Nara Hosp.···S967

16 : 20 ~ 16 : 50	e-Poster presentation 69 Knee: Ligament	Moderator G. Tajima
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3-DP-184 Biologically augmented ACL primary repair with fibrin clot placement and internal brace reinforcement*Hiroaki Tsukamoto, et al.*, Dept. of Orthop. Surg., Noshiro Kousei Medical Center···S968

3-DP-185 Effect of femoral tunnel method associated with tunnel coalition in double-bundle anterior cruciate ligament reconstruction: Chiba LEAF study*Ryo Nakane, et al.*, Dept. of Orthop. Surg., Graduate School of Medicine, Chiba Univ.···S968

- 3-DP-186 Reproducibility of the native anterior cruciate ligament mid-substance cross-sectional area in anatomic single bundle ACL reconstruction
 *Takanori Iriuchishima*, Dept. of Orthop. Surg., Keijinkai Shiroyama Hosp. ...S969
- 3-DP-187 One-year changes in femoral tunnel position and MRI tendon graft intensity after single-bundle anterior cruciate ligament reconstruction
 *Kanji Goto, et al.*, Dept. of Orthop. Surg., Hiroshima Univ. Hosp. ...S969
- 3-DP-188 Osteophytes enlarge while joint space is preserved in post-traumatic knee osteoarthritis more than 10 years after anterior cruciate ligament reconstruction
 *Kengo Sugitani, et al.*, Dept. of Orthop., Juntendo Univ. ...S970
- 3-DP-189 Limitation of medial patellofemoral ligament reconstruction using hamstring tendon
 ... *Hiroki Hijikata, et al.*, Div. of Orthop. Surg., Dept. of Regenerative and Transplant Medicine, Niigata Univ. Graduate School of Medical and Dental Sciences ...S970

17 : 10 ~ 17 : 45	e-Poster presentation 70 Miscellaneous	Moderator M. Miyagi
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- 3-DP-190 Non-operative treatment for acute Achilles tendon rupture: Evaluation of clinical results and tendon lengthening on magnetic resonance imaging
 *Toshito Yasuda, et al.*, Faculty of Nursing, Osaka Medical and Pharmaceutical Univ. ...S971
- 3-DP-191 Clinical outcomes of Achilles tendon repair using the hybrid SL method combining minimal invasiveness and suture strength *Shinji Imade, et al.*, Dept. of Orthop., Shimane Univ. ...S971
- 3-DP-192 Utility of a back support cushion in doppler ultrasonography for the evaluation of thoracic outlet syndrome *Chikara Watanabe, et al.*, Dept. of Orthop. Surg., Hiroshima Univ. Hosp. ...S972
- 3-DP-193 Association between masticatory force and musculoskeletal pain and function using community health screening data: The Yakumo study
 *Sadayuki Ito, et al.*, Dept. of Orthop./Rheumatology, Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine, Graduate School of Medicine, Nagoya Univ. ...S972
- 3-DP-194 Investigation of renal function in patients who visit community pharmacy after orthopaedic consultation: A descriptive cross-sectional study
 *Yoshifumi Yamashita, et al.*, Nanohana Kyushu Corporation Sakura Pharmacy Yukuhashi ...S973
- 3-DP-195 Does experiencing orthopaedic surgery influence medical students' aspiration to become orthopaedic surgeons?
 *Yumetaka Shinden, et al.*, Dept. of Orthop. Surg., Fukushima Medical Univ. ...S973
- 3-DP-196 Evaluation of the effectiveness of defensive postures against the asiatic black bear: Analysis of FY2023 data from Akita prefecture
 *Yuki Ishigaki, et al.*, Dept. of Orthop. Surg., Akita Univ. Graduate School of Medicine ...S974

3rd Day May 23 e-Poster Booth 5
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9 : 15 ~ 9 : 50	e-Poster presentation 71 Disk	Moderator Y. Eguchi
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- 3-DP-197 Quantitative MRI evaluation of intervertebral disc changes after condoliase injection for lumbar disc herniation *Yasushi Murakami, et al.*, Dept. of Orthop. Surg., Hiroshima City North Medical Center Asa Citizens Hosp. ...S975
- 3-DP-198 Is condoliase injection therapy effective in postoperative recurrent cases of lumbar disc herniation? *Tomowaki Nakagawa, et al.*, Dept. of Orthop. Surg., Sendai Orthop. Hosp. ...S975
- 3-DP-199 Surgical outcomes for lumbar disc hernia under 20 years old: A comparative study of condoliase and MED *Atsushi Yoshioka, et al.*, Hachiya Orthop. Hosp. ...S976

- 3-DP-200 Hernia reduction and signal intensity changes after chondriase therapy for lumbar disc herniation *Kazuhiro Fujimoto, et al.*, Dept. of Orthop. Surg., Yamaguchi Univ. Graduate School of Medicine...S976
- 3-DP-201 Characteristics of endplate changes following discectomy and their effects on clinical symptoms in patients with lumbar disc herniation *Kenichi Kawaguchi, et al.*, Dept. of Rehabilitation Medicine, Kyushu Univ. Hosp....S977
- 3-DP-202 Dorsal epidural extrusion of thoracic disc herniation: A systematic review establishing a thoracic-specific prognostic benchmark *Takayuki Kitahara, et al.*, Dept. of Orthop., Institute of Biomedical Sciences, Tokushima Univ. Graduate School...S977
- 3-DP-203 Clinical efficacy and safety of cell transplantation and platelet-rich plasma therapy for discogenic pain: A systematic review *Shota Tamagawa, et al.*, Dept. of Orthop., Juntendo Univ....S978

10 : 05 ~ 10 : 40	e-Poster presentation 72 Spine: Miscellaneous	Moderator H. Nakajima
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- 3-DP-204 GNRI reflects preoperative skeletal muscle index in patients undergoing spine surgery *Takahiro Hideshima, et al.*, Dept. of Orthop. Surg., St. Marianna Univ. School of Medicine, Yokohama City Seibu Hosp....S979
- 3-DP-205 Cervical spine disorders mimicking peripheral neuropathy: A clinical analysis *Takao Omura, et al.*, Dept. of Div. of Surg. Care, Morimachi Hamamatsu Univ. School of Medicine...S979
- 3-DP-206 Surgical outcomes of spinal surgery in recipients of living donor kidney transplants *Katsunori Fukutake, et al.*, Dept. of Orthop. Surg., Toho Univ. Omori Medical Center...S980
- 3-DP-207 Automated spinal cord stress mapping on sagittal MRI via deep learning and finite element modeling *Ryu Koda, et al.*, Tohoku Univ. Graduate School of Medicine...S980
- 3-DP-208 Comparison of vertebral collapse progression in acute osteoporotic vertebral fractures treated with bisphosphonates versus romosozumab *Kento Okamoto, et al.*, Dept. of Orthop. Surg., Yuri Kumiai General Hosp....S981
- 3-DP-209 Preoperative assessment based on nutritional status *Masashiro Inuma, et al.*, Dept. of Orthop. Surg., St. Marianna Univ. School of Medicine, Yokohama City Seibu Hosp....S981
- 3-DP-210 Association between number of remaining teeth and trabeculae bone remodeling and vertebral endplate cyst: A retrospective cohort study *Shin Yokoyama, et al.*, Dept. of Orthop. Surg., Otaru General Hosp....S982

10 : 55 ~ 11 : 30	e-Poster presentation 73 Spinal tumor	Moderator O. Tsuji
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- 3-DP-211 Mid-to long-term outcomes more than 5 years after surgical resection of spinal schwannomas *Akiko Matsumoto, et al.*, Dept. of Orthop. Surg., Hiroshima City North Medical Center Asa Citizens Hosp....S983
- 3-DP-212 The usefulness of the spinal metastasis cancer board aimed at registering all cases within the hospital *Shintaro Obata, et al.*, Dept. of Orthop. Surg., The Jikei Univ. School of Medicine...S983
- 3-DP-213 ADL outcomes and associated factors after surgery for renal cell carcinoma spinal metastases: JASA multicenter prospective study *Takuya Iimura, et al.*, Dept. of Orthop. Surg., Dokkyo Medical Univ....S984
- 3-DP-214 Postoperative function of lower extremity muscles and walking ability after total en bloc spondylectomy for lumbar spinal tumors *Satoshi Kato, et al.*, Dept. of Orthop. Surg., Graduate School of Medical Sciences, Kanazawa Univ....S984

- 3-DP-230 Impact of nutritional status on bone density in spinal surgery
 *Masashiro Inuma, et al.*, Dept. of Orthop. Surg.,
 St. Marianna Univ. School of Medicine, Yokohama City Seibu Hosp. ...S993
- 3-DP-231 Results of spine surgeries in nonagenarians compared with octogenarians
 *Takashi Sono, et al.*, Dept. of Orthop. Surg., Kyoto Univ. Hosp. ...S994

16 : 20 ~ 16 : 55	e-Poster presentation 76 Spine: Complication	Moderator K. Hashimoto
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- 3-DP-232 Investigation of pathogens and onset timing in reoperations for postoperative infections following cervical laminoplasty and lumbar posterior decompression
 *Taketo Ogimoto, et al.*, Dept. of Orthop. Surg.,
 Hiroshima City North Medical Center Asa Citizens Hosp. ...S995
- 3-DP-233 Dysphagia in older patients with degenerative cervical myelopathy: A longitudinal analysis of subaxial posterior cervical surgery
 *Sota Nagai, et al.*, Dept. of Orthop. Surg., Fujita Health Univ. Hosp. ...S995
- 3-DP-234 Correlation between myelopathy severity and complications after ACDF: A multi-center study
 *Akihiro Horiuchi, et al.*, Dept. of Orthop. Surg., Institute of Science Tokyo Hosp. ...S996
- 3-DP-235 Incidence and risk factors of vertebral artery injury associated with cervical spinal cord and spine injuries at our institution
 *Yusuke Togo, et al.*, Dept. of Orthop. Surg., Hyogo Emergency Medical Center ...S996
- 3-DP-236 Efficacy and safety of perioperative intravenous steroid administration in anterior cervical spine surgery: A systematic review and meta-analysis
 *Kentaro Yamada, et al.*, Dept. of Orthop. and Spinal Surg.,
 Graduate School of Medical and Dental Sciences, Institute of Science Tokyo ...S997
- 3-DP-237 Postoperative complications of lumbar spine surgery in patients with rheumatoid arthritis: A retrospective nationwide database study
 *Hideki Nakamoto, et al.*, Dept. of Orthop. Surg.,
 The Univ. of Tokyo Hosp., The Univ. of Tokyo ...S997
- 3-DP-238 A study on perioperative safety of posterior or transforaminal lumbar interbody fusion undergoing while continuing low-dose aspirin oral therapy
 *Hiroki Yamagata, et al.*, Dept. of Orthop. Surg., New Tokyo Hosp. ...S998

17 : 10 ~ 17 : 45	e-Poster presentation 77 Spine: Imaging	Moderator S. Seki
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- 3-DP-239 A new standard for cervical nerve depiction: The 0-1 sign under ultrasound guidance
 *Yuyu Ishimoto, et al.*, Dept. of Orthop. Surg., Wakayama Medical Univ. ...S999
- 3-DP-240 Evaluation of neural conduction of the cervical myelopathy using magnetospinography
 *Shigenori Kawabata*, Dept. of Advanced Technology in Medicine, Institute of Science Tokyo ...S999
- 3-DP-241 The change of preoperative and intraoperative cervical vertebral level confirmed by X-ray
 *Masashi Wakasugi, et al.*, Dept. of Orthop. Surg., Niigata Central Hosp. ...S1000
- 3-DP-242 Evaluation of cervical foraminal stenosis using multiplanar reconstruction MRI
 *Tatsuya Shibata, et al.*, Dept. of Orthop. Surg., Fukuoka Univ. ...S1000
- 3-DP-243 MR bone imaging for lumbar spondylolysis: Optimizing lesion detectability
 *Yutaka Kinoshita, et al.*, Dept. of Orthop.,
 Institute of Biomedical Sciences, Tokushima Univ. Graduate School ...S1001
- 3-DP-244 Early screening of superior mesenteric artery syndrome and celiac artery compression syndrome after spinal corrective fusion surgery using ultrasonography
 *Yuyu Ishimoto, et al.*, Dept. of Orthop. Surg., Wakayama Medical Univ. ...S1001
- 3-DP-245 Evaluation of the utility of MR bone imaging for preoperative planning in lumbar spine surgery: Comparison with CT measurements
 *Noritaka Suzuki, et al.*, Dept. of Orthop. Surg., Graduate School of Medicine, Chiba Univ. ...S1002

3rd Day May 23 e-Poster Booth 6

9 : 15 ~ 9 : 50 e-Poster presentation 78 RA 1 Moderator T. Nishikawa

- 3-DP-246 Treatment effect of orthopaedic intervention for patients with inflammatory refractory rheumatoid arthritis ···· *Shogo Toyama, et al.*, Dept. of Rheumatol., Niigata Rheumatic Center···S1003
- 3-DP-247 Outcome of joint-preserving surgery for rheumatoid forefoot deformity complicated by severe hallux valgus ·········· *Ayako Kubota, et al.*, Dept. of Orthop. Surg., Toho Univ. (Omori)···S1003
- 3-DP-248 Evaluation of the effectiveness of TKA for rheumatoid arthritis of the knee: A comparative study with osteoarthritis using 2011 KSS
··········· *Masanori Tsubosaka, et al.*, Dept. of Orthop. Surg.,
Kobe Univ. Graduate School of Medicine···S1004
- 3-DP-249 Is the survival rate of total knee arthroplasty in RA shorter than that of OA in the current medical status? ·········· *Hiromu Ito, et al.*, Dept. of Orthop. Surg., Kurashiki Central Hosp.···S1004
- 3-DP-250 Long-term outcomes of resection arthroplasty for forefoot deformity in patients with rheumatoid arthritis ·········· *Keita Nagira, et al.*, Dept. of Orthop. Surg., Tottori Univ.···S1005
- 3-DP-251 Differences in motor function and physical activity levels after total knee arthroplasty in patients with rheumatoid arthritis and osteoarthritis
··········· *Kazuki Orita, et al.*, Dept. of Orthop. Surg., Yodogawa Christian Hosp.···S1005
- 3-DP-252 Comparative retrospective study of reverse shoulder arthroplasty in patients with rheumatoid shoulder and cuff tear arthropathy
····· *Yuichi Nagase, et al.*, Dept. of Rheumatic Surg., Tokyo Metropolitan Tama Medical Center···S1006

10 : 05 ~ 10 : 40 e-Poster presentation 79 RA 2 Moderator A. Abe

- 3-DP-253 Prediction of extensor tendon rupture risk using wrist radiographs in rheumatoid arthritis
··········· *Tatsuki Itoh, et al.*, Dept. of Orthop., Juntendo Univ.···S1007
- 3-DP-254 Disease control and comorbidity prevention are crucial to maintain HAQ remission over 10 years in patients with rheumatoid arthritis
··········· *Kensuke Koyama, et al.*, Dept. of Rheumatology, Nirasaki City Hosp.···S1007
- 3-DP-255 Can fatigue in RA patients be assessed by disease activity?: A study using the Okomarigoto Check Sheet ······ *Kazuyuki Tanaka, et al.*, Dept. of Orthop. Surg., Osaka City General Hosp.···S1008
- 3-DP-256 Efficacy of late onset rheumatoid arthritis patients treated with TNF inhibitor, IL-6 receptor inhibitor, abatacept and JAK inhibitor
··········· *Shohei Anno, et al.*, Dept. of Orthop. Surg., Yodogawa Christian Hosp.···S1008
- 3-DP-257 Clinical results of TKA for RA valgus knees: Analysis of functional scores and PROMs
······· *Keiichiro Yamamoto, et al.*, Dept. of Orthop. Surg., Toho Univ. Sakura Medical Center···S1009
- 3-DP-258 Therapeutic efficacy of ozoralizumab for foot symptoms in patients with rheumatoid arthritis at our institution ·········· *Kotaro Matsuda, et al.*, Dept. of Orthop. Surg., Kurume Univ.···S1009
- 3-DP-259 Effectiveness of JAK inhibitors for patients with difficult-to-treat rheumatoid arthritis (D2TRA)
··········· *Toshifumi Sato, et al.*, Dept. of Orthop./Rheumatology,
Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine,
Graduate School of Medicine, Nagoya Univ.···S1010

10 : 55 ~ 11 : 30 e-Poster presentation 80 RA 3 Moderator M. Naito

- 3-DP-260 Impact of frailty on maintenance of HAQ remission in patients with rheumatoid arthritis: A multicenter observational analysis (T-FLAG study)
··········· *Mochihito Suzuki, et al.*, Dept. of Orthop./Rheumatology,
Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine,
Graduate School of Medicine, Nagoya Univ.···S1011

- 3-DP-261 Distinct distribution of vertebral fractures in patients with rheumatoid arthritis
 *Asami Zenitani, et al.*, Dept. of Orthop. Surg., The Jikei Univ. School of Medicine...S1011
- 3-DP-262 Matrix metalloproteinase-3 is physiologically produced in muscle tissue
 *Yuichi Akizuki, et al.*, Dept. of Orthop. Surg., Shirahama Hamayu Hosp....S1012
- 3-DP-263 Efficacy of non-contrast perfusion-weighted MRI in rheumatoid arthritis of the hand
 *Satoshi Nakayama, et al.*, Dept. of Orthop. Surg., Teikyo Univ....S1012
- 3-DP-264 Association between laughter and non-inflammatory pain in rheumatoid arthritis patients
 *Yasumori Sobue, et al.*, Sobue Orthop. Clinic Yatomi...S1013
- 3-DP-265 Lower limb coronary alignment of CPAK classification in patients with rheumatoid arthritis
 *Kagayaki Sahara, et al.*, Dept. of Orthop. Surg., Hiratsuka Kyosai Hosp....S1013
- 3-DP-266 Characteristics of lymphoproliferative disorders in patients with elderly onset
 rheumatoid arthritis *Hikaru Sato, et al.*, Dept. of Orthop. Surg., Ogachi Central Hosp....S1014

14 : 40 ~ 15 : 15	e-Poster presentation 81 Basic research 1	Moderator K. Maeda
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- 3-DP-267 Targeting histamine H1 receptor signaling as a novel therapeutic strategy in osteoarthritis
 *Ichiro Kurakazu, et al.*, Dept. of Orthop. Surg., Kyushu Univ. Hosp....S1015
- 3-DP-268 Genome-wide association study of lumbar ligamentum flavum hypertrophy
 *Yosuke Takeichi, et al.*, Dept. of Orthop. Surg.,
 National Center for Geriatrics and Gerontology...S1015
- 3-DP-269 Pathological processes mediated by mechanotransduction at acute spinal cord injury
 *Atsushi Sakuraba, et al.*, Dept. of Orthop. Surg.,
 Faculty of Medicine and Graduate School of Medicine, Hokkaido Univ....S1016
- 3-DP-270 HAS2 overexpression exerts a chondroprotective effect in a mouse model of
 knee osteoarthritis *Keita Shimizu, et al.*, Dept. of Orthop./Rheumatology,
 Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine,
 Graduate School of Medicine, Nagoya Univ....S1016
- 3-DP-271 Preventive effect of platelet-rich plasma on fracture healing in a rat tibial nonunion model
 *Tokito Tatsuo, et al.*, Dept. of Physiology,
 Showa Medical Univ. Graduate School of Medicine...S1017
- 3-DP-272 Identification of stage-specific transcriptional signatures in osteoblasts of juvenile mouse
 long bones *Masato Saito, et al.*, Dept. of Orthop. Surg., Keio Univ....S1017
- 3-DP-273 Characterization of the bone metabolic activity of mesenchymal stromal cells in the
 Masquelet technique
 *Masao Suzuki, et al.*, Dept. of Orthop. Surg., Juntendo Univ. Urayasu Hosp....S1018

15 : 30 ~ 16 : 05	e-Poster presentation 82 Basic research 2	Moderator Y. Omata
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- 3-DP-274 Mechanisms of biofilm formation and molecular research of MRSA isolated from
 periprosthetic joint infections
 *Keigo Yonemoto, et al.*, Dept. of Orthop. Surg., The Jikei Univ. School of Medicine...S1019
- 3-DP-275 Anti-inflammatory and chondroprotective effects of the combination of tocilizumab and
 celecoxib in damaged cartilage
 *Shusuke Ueda, et al.*, Dept. of Orthop. Surg., Kanazawa Medical Univ....S1019
- 3-DP-276 Intraoperative exposure of focused shock waves for osteochondral defects in an immature
 porcine model *Kenji Yokoyama, et al.*, Dept. of Orthop.,
 Institute of Biomedical Sciences, Tokushima Univ. Graduate School...S1020
- 3-DP-277 Effect of knee flexion angle on the direction and magnitude of tensile force in complete lateral
 meniscus radial tears
 *Kodai Hamaoka, et al.*, Dept. of Orthop. Surg., Sapporo Medical Univ....S1020

- 3-DP-278 Development of a physiological disuse muscle atrophy model allowing for load and joint movement *Yusuke Muranaka*, Dept. of Orthop. Surg., Hokkaido Univ. Hosp.···S1021
- 3-DP-279 Three-dimensional anthropometric analysis of the elbow joint *Ayaka Kuzuhara, et al.*, Dept. of Orthop. Surg., Toho Univ. (Omori)···S1021
- 3-DP-280 Anatomical study to clarify the pathophysiology of Monteggia fracture-dislocations: Focusing on the annular ligament *Takuya Tada, et al.*, Dept. of Orthop. Surg., Kitasato Univ.···S1022

16 : 20 ~ 16 : 55 e-Poster presentation 83 Basic research 3 Moderator A. Nimura

- 3-DP-281 The effect of forearm pronation on radiocapitellar joint contact pressure: A cadaveric study *Masataka Minami, et al.*, Dept. of Orthop., Mayo Clinic···S1023
- 3-DP-282 The effect of forearm flexor loading on radiocapitellar joint contact pressure: A cadaveric study *Masataka Minami, et al.*, Dept. of Orthop., Mayo Clinic···S1023
- 3-DP-283 Biomechanical assessment of single- vs. double-bundle coracoclavicular reconstruction with acromioclavicular augmentation: A fresh-frozen cadaveric study *Yutoku Yamada, et al.*, Dept. of Orthop. Surg., Graduate School of Medicine, Chiba Univ.···S1024
- 3-DP-284 Relationship between side-locking loop technique and characteristics of suture materials for Achilles tendon suture: An *in vitro* bovine study *Masaya Sato, et al.*, Dept. of Orthop., Shimane Univ.···S1024
- 3-DP-285 The role of the ischiofemoral ligament in hip dislocation resistance: A cadaveric study *Yoshiaki Ito, et al.*, Dept. of Orthop. Surg., Faculty of Medicine, Univ. of Toyama···S1025
- 3-DP-286 Biomechanical assessment of ankle instability following anterior talofibular ligament injury: Focus on the superior fascicle *Tomoki Koyama, et al.*, Dept. of Orthop. Surg., Sapporo Medical Univ.···S1025
- 3-DP-287 Evaluation of joint stability in elbow dislocation models using fresh frozen cadavers *Megumi Yoshikawa, et al.*, Dept. of Orthop. Surg., Graduate School of Medicine, Chiba Univ.···S1026

17 : 10 ~ 17 : 45 e-Poster presentation 84 Basic research 4 Moderator R. Takeda

- 3-DP-288 Optical motion capture analysis of thumb pronation angles during activities of daily living *Ryutaro Shingyouchi, et al.*, Dept. of Orthop. Surg., Graduate School of Medicine, Chiba Univ.···S1027
- 3-DP-289 Three-dimensional motion analysis of thumb pronation movement using optical motion capture system: Comparative study with Kapandji score *Ryutaro Shingyouchi, et al.*, Dept. of Orthop. Surg., Graduate School of Medicine, Chiba Univ.···S1027
- 3-DP-290 Longitudinal evaluation of cartilage changes after intra-articular ankle fracture surgery using T1rho mapping *Tomoko Wakejima, et al.*, Dept. of Orthop. Surg., St. Marianna Univ. Hosp.···S1028
- 3-DP-291 Visualization of pediatric elbow cartilage using dual-energy CT *Hiroki Kondo, et al.*, Dept. of Orthop. Surg., Graduate School of Medicine, The Univ. of Osaka···S1028
- 3-DP-292 High accuracy of CR alignment using three-dimensional planning software: A basic study *Yuki Komuta, et al.*, Div. of Orthop. Surg., Dept. of Regenerative and Transplant Medicine, Niigata Univ. Graduate School of Medical and Dental Sciences···S1029
- 3-DP-293 Impact of scaphoid intraosseous rotation angle on its kinematics *Takuto Takeda, et al.*, Dept. of Orthop. Surg., Graduate School of Medicine, Chiba Univ.···S1029
- 3-DP-294 Validation of relative CT Hounsfield unit profiling for accurate assessment of subchondral bone thickness *Ryoya Shiode, et al.*, Dept. of Orthop. Surg., Graduate School of Medicine, The Univ. of Osaka···S1030

4th Day May 24 Room 1

8 : 00 ~ 9 : 00 Instructional lecture 43 Moderator N. Nagoshi

- 4-1-EL43 Rehabilitation strategy with regenerative medicine for spinal cord injury
*Toru Ogata*, Rehabilitation Center, The Univ. of Tokyo Hosp.···S1031

**9 : 15 ~ 11 : 15 JOA Directors' proposed symposium 12 Moderators W. Ogawa, T. Ohe
 Conquering metabolic syndrome and locomotive syndrome: Bidirectional causality**

- 4-1-JS12-1 Mechanisms, prevention and treatment of sarcopenic obesity
*Ken Sugimoto*, General Geriatric Medicine, Kawasaki Medical School···S1032
- 4-1-JS12-2 Sarcopenic obesity and locomotive syndrome
*Noriko Satoh-Asahara, et al.*, National Center for Geriatrics and Gerontology···S1032
- 4-1-JS12-3 Establishing a novel exercise gauge for combating metabolic syndrome and
 locomotive syndrome*Masato Iwabu*, Nippon Medical School···S1033
- 4-1-JS12-4 Diabetes (CKD, arteriosclerosis) causes bone deterioration and fractures without low bone
 mineral density ···*Mitsuru Saito*, Dept. of Orthop. Surg., The Jikei Univ. School of Medicine···S1033
- 4-1-JS12-5 Impact of diabetes and impaired glucose tolerance on orthopaedic surgical outcomes
*Satomi Abe, et al.*, Dept. of Orthop. Surg., Asahikawa Medical Univ.···S1034
- 4-1-JS12-6 Clinical significance of osteosarcopenia in relation to locomotive syndrome and diabetes, and
 the potential of exercise interventions
*Ryuki Hashida, et al.*, Dept. of Orthop. Surg., Kurume Univ.···S1034

13 : 25 ~ 14 : 25 Instructional lecture 44 Moderator K. Okazaki

- 4-1-EL44 A multifaceted approach to knee joint preservation
*Masakazu Ishikawa*, Dept. of Orthop. Surg., Kagawa Univ.···S1035

14 : 45 ~ 15 : 45 Instructional lecture 45 Moderator S. Kuriyama

- 4-1-EL45 Knee arthroplasty for enhanced patient satisfaction: The future driven by technology
*Hiroshi Inui*, Dept. of Orthop. Surg., Saitama Medical Center, Saitama Medical Univ.···S1035

4th Day May 24 Room 2

8 : 00 ~ 9 : 00 Free papers 80 Trauma registry and cohort study Moderators T. Sato, K. Ono

- 4-2-1 Development and operation of orthopaedic trauma registry: A prospective cohort study (TARGET)
*Takahiro Inui, et al.*, Dept. of Orthop. Surg., Teikyo Univ.···S1036
- 4-2-2 Risk factors for postoperative complications in Lisfranc injuries: A multicenter study (TRON)
*Yugo Minoura, et al.*, Dept. of Orthop. Surg., Gifu Kumiakosei Hosp.···S1036
- 4-2-3 Nationwide epidemiology of motorcycle-related fractures in Sweden: A study conducted during
 fellowship at Uppsala University*Mitsutoshi Ota, et al.*, Dept. of Orthop. Surg.,
 Faculty of Medicine and Graduate School of Medicine, Hokkaido Univ.···S1037
- 4-2-4 Impact of school closures and reopenings on pediatric fracture incidence during the
 COVID-19 pandemic
*Hiroshi Koga, et al.*, Div. of Musculoskeletal Science for Frailty Niigata Univ.
 Graduate School of Medical and Dental Sciences···S1037
- 4-2-5 The effect of time to surgery on outcomes in older adults with femoral shaft fractures: A nationwide
 cohort study*Gaku Gondo, et al.*, Dept. of Healthcare Economics and Quality Management,
 Graduate School of Medicine, Kyoto Univ.···S1038

- 4-2-6 Comparison of cemented versus uncemented hemiarthroplasty for femoral neck fractures:
 A propensity score-matched analysis using Japan's diagnosis procedure combination database
 *Hideki Fukuchi, et al.*, Dept. of Orthop. Surg., Tohoku Univ. Graduate School of Medicine...S1038

9 : 15 ~ 10 : 35 JOA Directors' proposed symposium 13 Moderators Y. Shinto, Y. Tajiri
The role of orthopaedic surgeons in disaster response: Is treating injured patients enough?

- 4-2-JS13-1 Medical device distribution & logistics: The challenge to keep healthcare moving
 *Tomoko Arakawa*, Johnson & Johnson K.K...S1039
- 4-2-JS13-2 Efforts by the disaster response committee of the Japanese Orthopaedic Association in the
 initial response to disasters
 *Tomofumi Ogoshi*, Dept. of Emergency and Critical Medicine, Tottori Univ. Hosp...S1039
- 4-2-JS13-3 What happened when the disaster occurred?: Response of orthopaedic surgeons in the
 disaster area ... *Seiji Morikawa*, Dept. of Orthop. Surg., Nagano Matsushiro General Hosp...S1040
- 4-2-JS13-4 What is business continuity planning that orthopaedic surgeons should know?
 *Taketo Kurozumi*, Dept. of Emergency Medicine, Teikyo Univ...S1040
- 4-2-JS13-5 How orthopaedic private practitioners and clinics should respond to disasters: Business
 continuity planning to preventing related deaths and locomotive syndrome
 *Hidenori Kawamura*, Kawamura Orthop. Clinic...S1041

10 : 40 ~ 11 : 30 Free papers (English) 81 Trauma Moderators T. Miyamoto, C. Terada

- 4-2-7 Early versus delayed weight-bearing after open reduction and internal fixation of tibial plateau
 fractures: Systematic review of randomized controlled trials
 *Abdalla A. Mohamed, et al.*, Faculty of Medicine, October 6 Univ., Giza, Egypt...S1042
- 4-2-8 Selective anterior fixation for rami fractures in anteroposterior compression-type pelvic ring
 injuries: Impact of posterior stability
 *Song Hyung Keun, et al.*, Dept. of Orthop. Surg., Ajou Univ. Hosp., Suwon, Korea...S1042
- 4-2-9 Machine learning of femoral fracture risk and recovery using deprivation and bone health data
 *Sahnaz Vivinda Putri*, Health Management Lab.,
 International Univ. Semen Indonesia, Gresik, Indonesia...S1043
- 4-2-10 Prognostic value of the 5-point modified frailty index in geriatric hip fractures: A survival analysis
 from a resource-limited country ... *Sitanshu Barik, et al.*, Dept. of Orthop., AIIMS, Nagpur, India...S1043
- 4-2-11 Climate extremes and mental health vulnerabilities as interactive determinants of fracture
 incidence and disability burden across environmental and psychosocial contexts
 *Naura Auny*, Dept. of Research and Development,
 Nusantara Young Minds, Jakarta, Indonesia...S1044

12 : 00 ~ 13 : 10 Luncheon seminar 37 Moderator R. Kuroda

- 4-2-LS37 Evolving obesity management: The potential of body weight-centric orthopaedic care
 *Wataru Ogawa*, Div. of Translational Research,
 Section of Metabolic Disease, Kobe Univ. Graduate School of Medicine...S1045

13 : 25 ~ 14 : 25 Instructional lecture 46 Moderator K. Nakata

- 4-2-EL46 System biomechanics of functional adaptation supporting bone integrity and safety
 *Taiji Adachi*, Institute for Life and Medical Sciences, Kyoto Univ...S1046

14 : 40 ~ 15 : 40 Instructional lecture 47 Moderator T. Ozaki

- 4-2-EL47 What is needed in healthcare settings?: What we can learn from lawyer
 *Taro Mizunuma*, Otake Law Offices...S1046

4th Day May 24 Room 3

8 : 00 ~ 9 : 00 Free papers 82 Cervical spine Moderators Y. Oshima, Y. Kudo

- 4-3-1 Cost-effectiveness of alternate level instrumentation in open-door cervical laminoplasty:
A secondary analysis of a multicenter, randomized, controlled trial
.....*Masashi Tsujino, et al.*, Dept. of Orthop. Surg.,
Osaka Metropolitan Univ. Graduate School of Medicine...S1047
- 4-3-2 Clinical effectiveness of Glisson traction for cervical radiculopathy: Comparison between cervical
disc herniation and foraminal stenosis
.....*Shin Matsushima, et al.*, Dept. of Orthop. Surg., Hakodate Central General Hosp...S1047
- 4-3-3 Impact of surgeon experience on surgical and patient-reported outcomes following posterior
decompression for degenerative cervical myelopathy: A prospective multicenter study
.....*Toshiki Okubo, et al.*, Dept. of Orthop. Surg., Keio Univ...S1048
- 4-3-4 Distinct cervical alignment features in retro-odontoid pseudotumor compared with cervical
spondylotic myelopathy
.....*Akira Honda*, Dept. of Orthop. Surg., Gunma Univ. Graduate School of Medicine...S1048
- 4-3-5 A study of the relationship between whole spinal sagittal alignment and electromyography in
patients with dropped head syndrome
.....*Yohei Miyamoto, et al.*, Dept. of Orthop. Surg., Showa Medical Univ. Hosp...S1049
- 4-3-6 C2 pelvic angle is an indicator of functional thoracolumbar alignment in middle-aged and
elderly population*Jun Ouchida, et al.*, Dept. of Orthop./Rheumatology,
Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine,
Graduate School of Medicine, Nagoya Univ...S1049

**9 : 15 ~ 10 : 35 JOA Directors' proposed symposium 14 Moderators M. Nakamura, R. Kuroda
Current status and future directions of regenerative treatment for musculoskeletal disorders**

- 4-3-JS14-1 Advancing tendon regeneration: Elucidating developmental mechanisms and
translational strategies*Ryo Nakamichi*, Dept. of Orthop. Surg.,
Science of Functional Recovery and Reconstruction, Faculty of Medicine,
Dentistry, and Pharmaceutical Sciences, Okayama Univ...S1050
- 4-3-JS14-2 CD34-positive cell transplantation and bone morphogenetic protein-2 to treat
fracture nonunion
.....*Takahiro Niikura, et al.*, Dept. of Orthop. Surg., Hyogo Prefectural Nishinomiya Hosp...S1050
- 4-3-JS14-3 Synovial mesenchymal stem cell-augmented meniscal repair for flap tears: Phase III
multicenter clinical trial
.....*Ichiro Sekiya, et al.*, Center for Stem Cell and Regenerative Medicine,
Institute of Science Tokyo...S1051
- 4-3-JS14-4 Cartilage development and regeneration of cartilage
.....*Noriyuki Tsumaki*, Dept. of Tissue Biochemistry, The Univ. of Osaka...S1051
- 4-3-JS14-5 Novel regenerative strategies inspired by intervertebral disc biology
.....*Daisuke Sakai, et al.*, Dept. of Orthop. Surg., Surgical Science, Tokai Univ...S1052
- 4-3-JS14-6 Regenerative medicine for spinal cord injury using human iPS cells
.....*Narihito Nagoshi, et al.*, Dept. of Orthop. Surg., Keio Univ...S1052

10 : 40 ~ 11 : 30 Free papers 83 Spine: Complication 2 Moderators S. Taniguchi, S. Tanishima

- 4-3-7 Perioperative safety of lumbar decompression surgery performed under continuous low-dose
aspirin administration*Hirimitsu Takaoka, et al.*, Dept. of Orthop. Surg., New Tokyo Hosp...S1053

- 4-3-8 Incidence, causes and risk factors for unplanned return to the operating room within 30 days following elective spine surgery
 *Yuki Taniguchi, et al.*, Dept. of Orthop. Surg., The Univ. of Tokyo Hosp., The Univ. of Tokyo...S1053
- 4-3-9 Analysis of discriminative factors between SSI and UTI after spinal instrumentation surgery for lumbar degenerative disease *Kazumasa Konishi, et al.*, Dept. of Orthop. Surg., Kyorin Univ....S1054
- 4-3-10 Multivariate analysis of risk factors for airway compromise after anterior cervical surgery
 *Yohei Ito, et al.*, Dept. of Orthop. Surg., Yokohama City Univ. Hosp....S1054
- 4-3-11 Intraoperative complications in uibe surgery for lumbar degenerative disease
 *Keiichi Tsuda, et al.*, Dept. of Orthop. Surg., Fukuoka Spine Clinic...S1055

12 : 00 ~ 13 : 10	Luncheon seminar 38	Moderator T. Matsumura
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- 4-3-LS38-1 Practical wound closure techniques based on wound healing: How to prevent SSI, skin ulcers, and hypertrophic scars *Rei Ogawa*, Dept. of Plast. Surg., Nippon Medical School...S1056
- 4-3-LS38-2 Reconsidering wound closure in extensor surfaces and exposed regions
 *Chuji Terada*, Dept. of Orthop. Surg., Fukuyama City Hosp....S1056

13 : 25 ~ 14 : 25	Instructional lecture 48	Moderator Y. Eguchi
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- 4-3-EL48 We can learn the prevention and treatment of DDH from history
 *Kiyoshi Aoki, et al.*, Dept. of Orthop. Surg.,
 Asahigawasou Rehabilitation and Medical Center...S1057

14 : 40 ~ 15 : 40	Instructional lecture 49	Moderator T. Yamamoto
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- 4-3-EL49 Treatment strategies for osteonecrosis of the femoral head: Current status and future prospects *Goro Motomura*, Dept. of Orthop. Surg.,
 Clinical Medicine, Graduate School of Medical Sciences, Kyushu Univ....S1057

4th Day May 24 Room 4

8 : 00 ~ 9 : 00	Instructional lecture 50	Moderator A. Matsumine
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- 4-4-EL50 Multidisciplinary management of metastatic bone tumors
 *Hirohisa Katagiri*, Div. of Orthop. Oncology, Shizuoka Cancer Center...S1058

9 : 15 ~ 10 : 35	Symposium 58	Moderators T. Morii, Y. Morizaki
Medical digital transformation		

- 4-4-S58-1 Government initiatives for promoting healthcare DX
 *Eisaku Kishita*, Ministry of Health, Labour and Welfare...S1059
- 4-4-S58-2 Orthopaedic care and medical digital transformation: National trends and efforts by the Japan Medical Association *Kimiyuki Nagasima*, Japan Medical Association...S1059
- 4-4-S58-3 The role of digital transformation in orthopaedic
 *Yutaka Morizaki, et al.*, NTT Medical Center Tokyo...S1060
- 4-4-S58-4 Digital transformation for operating room management
 *Takahisa Goto*, Dept. of Anesthesiology and Critical Care Medicine,
 Yokohama City Univ. School of Medicine...S1060
- 4-4-S58-5 Digital transformation in medicine and medical education at Nagasaki University
 *Atsushi Kawakami, et al.*, Dept. of Immunology and Rheumatology,
 Div. of Advanced Preventive Medical Sciences,
 Nagasaki Univ. Graduate School of Biomedical Sciences...S1061

10 : 40 ~ 11 : 30 Free papers 84 TKA 2 Moderators M. Akagi, T. Nakamura

- 4-4-1 Utility of a motor function analyzer for assessing severity of knee osteoarthritis and functional outcomes after total knee arthroplasty
 *Ryosuke Sugimoto, et al.*, Dept. of Orthop. Surg., Nagoya Univ. ...S1062
- 4-4-2 Preoperative risk factors associated with failure to achieve MIC and PASS after total knee arthroplasty *Katsuyuki Imamura, et al.*, Dept. of Orthop. Surg., Tenyoukai Chuo Hosp. ...S1062
- 4-4-3 Genome-wide analysis of tagSNPs and functional pathways associated with persistent pain after total knee arthroplasty
 *Yoshinori Tojo, et al.*, Dept. of Orthop. Surg., Kawasaki Medical School General Medical Center ...S1063
- 4-4-4 Bone quality in hemodialysis patients undergoing total knee arthroplasty: Comparison with OA and RA using proximal tibial resection Hounsfield units
 *Shinkichi Arisumi, et al.*, Dept. of Orthop. Surg., Japanese Fukuoka Red Cross Hosp. ...S1063
- 4-4-5 Correlation between correlation between postoperative satisfaction and patient-reported outcomes after TKA in RA patients
 *Kosuke Kumagai, et al.*, Dept. of Orthop. Surg., Shiga Univ. of Medical Science ...S1064

12 : 00 ~ 13 : 10 Luncheon seminar 39 Moderator N. Adachi

- 4-4-LS39 Ultrasound-guided clinical practice for knee osteoarthritis
 *Junsuke Nakase*, Dept. of Orthop. Surg.,
 Graduate School of Medical Sciences, Kanazawa Univ. ...S1065

13 : 25 ~ 14 : 25 Instructional lecture 51 Moderator T. Aoki

- 4-4-EL51 Learning from Para Sports: The potential of the musculoskeletal system
 *Yuki Shiota*, Dept. of Sports Medicine, Juntendo Univ. School of Sports and Health Science ...S1065

14 : 40 ~ 15 : 40 Instructional lecture 52 Moderator N. Haga

- 4-4-EL52 Radiodiagnosis for skeletal dysplasias *Gen Nishimura*, Musashino-Yowakai Hosp. ...S1066

4th Day May 24 Room 5

8 : 00 ~ 9 : 00 Instructional lecture 53 Moderator H. Koga

- 4-5-EL53 Treatments for meniscal injuries in athletes
 *Takehiko Matsushita, et al.*, Dept. of Orthop. Surg., Meiwa Hosp. ...S1066

9 : 15 ~ 10 : 15 Instructional lecture 54 Moderator N. Adachi

- 4-5-EL54-1 Basic strategy for ACL reconstruction *Konsei Shino*, Sports Orthop. Center, Yukioka Hosp. ...S1067
- 4-5-EL54-2 What happens when anatomical ACL reconstruction is not performed?: Revision ACL reconstruction as a salvage procedure
 *Shuji Taketomi, et al.*, Orthop. Surg., Sensory and Motor System Medicine,
 Surgical Sciences, Graduate School of Medicine, The Univ. of Tokyo ...S1067

10 : 30 ~ 11 : 30 Instructional lecture 55 Moderator Y. Tanaka

- 4-5-EL55 Update on sports injuries of the foot and ankle
 *Ichiro Yoshimura*, Faculty of Sports and Health Science, Fukuoka Univ. ...S1068

12 : 00 ~ 13 : 10 Luncheon seminar 40 Moderator Y. Shinto

- 4-5-LS40 Can bone forming agents live up to expectations? *Fumitoshi Omura*, Koenji Orthop. Clinic ...S1068

13 : 25 ~ 14 : 45 JOA Directors' proposed symposium 15 Moderators H. Taneichi, K. Takahashi
Current status and future prospects of cadaver surgical training (CST) in orthopaedics

- 4-5-JS15-1 Legal and ethical considerations in the implementation of CST and R&D
 *Toshiaki Shichinohe*, Center for Education Research & Innovation of
 Advanced Medical Technology, Hokkaido Univ. Hosp.···S1069
- 4-5-JS15-2 Ethical issues in cadaver dissection will continue to reemerge
 *Takane Suzuki*, Dept. of Bioenvironmental Medicine,
 Graduate School of Medicine, Chiba Univ.···S1069
- 4-5-JS15-3 Clinical anatomy laboratory in Kyoto University
 *Shuichi Matsuda*, Dept. of Orthop. Surg., Graduate School of Medicine, Kyoto Univ.···S1070
- 4-5-JS15-4 Current situation and future prospects of cadaver surgical training (CST) in the orthopaedics
 field: R&D initiatives
 *Ryosuke Kuroda, et al.*, Dept. of Orthop. Surg., Kobe Univ. Graduate School of Medicine···S1070
- 4-5-JS15-5 Cadaver surgical training in Osaka University
 *Seiji Okada*, Dept. of Orthop. Surg., Graduate School of Medicine, The Univ. of Osaka···S1071
- 4-5-JS15-6 Cadaveric surgical training (CST) in the Japanese Society for Surgery of the Foot
 *Atsushi Teramoto, et al.*, Dept. of Orthop. Surg., Sapporo Medical Univ.···S1071
- 4-5-JS15-7 Development of a partial fixation method for overcoming limitations of Thiel's method and its
 application to CST *Takaaki Komiyama, et al.*, Dept. of Human Morphology,
 Div. of Technical Support for Medical Science, Comprehensive Technical Solutions,
 Okayama Univ.···S1072

14 : 50 ~ 15 : 40 Free papers (English) 85 Tumor and infection Moderators T. Yasuda, A. Ogose

- 4-5-1 Machine learning survival modeling of osteosarcoma clonal evolution using genomic and
 drug-response data for orthopaedic oncology prognostication
 *Rifaldy Fajar, et al.*, AI-BioMedicine Research Group,
 IMCDS-BioMed Research Foundation, Jakarta, Indonesia···S1073
- 4-5-2 Comparing the efficacy of separation surgery and palliative decompression followed by
 radiotherapy in spinal metastasis: Six- and twelve-month survival outcomes
 *Nakarin Nimpisut, et al.*, Dept. of Orthop.,
 Institute of Medicine, Suranaree Univ. of Technology, Nakhon Ratchasima, Thailand···S1073
- 4-5-3 What predicts success or failure of debridement, antibiotics and implant retention in 158 infected
 total hip arthroplasties?
 *Scott M. Bolam, et al.*, Dept. of Orthop. Surg., North Shore Hosp., Auckland, New Zealand···S1074
- 4-5-4 Microbial resistance patterns in periprosthetic joint infection of the knee: A twenty-four-year
 longitudinal study
 *Ruikang Guo, et al.*, Dept. of Orthop. Surg., North Shore Hosp., Auckland, New Zealand···S1074
- 4-5-5 Negative pressure antibiotic instillation (NPAI) therapy: An innovative hemovac-based system for
 prosthesis salvage in chronic prosthetic joint infection
 *Chun Cheng Lin, et al.*, Div. of Trauma, Dept. of Orthop.,
 Taipei Veterans General Hosp., Taipei, Taiwan···S1075

4th Day May 24 Room 6

8 : 00 ~ 9 : 00 Instructional lecture 56 Moderator T. Nakagawa

- 4-6-EL56 Functional anatomy and biomechanics essential for understanding total shoulder arthroplasty
 *Hiroyasu Ikegami*, Dept. of Orthop. Surg., Toho Univ. (Ohashi)···S1076

9 : 15 ~ 10 : 15	Instructional lecture 57	Moderator K. Ebina
-------------------------	---------------------------------	---------------------------

4-6-EL57 Secondary osteoporosis and other bone disorders with high fracture risk
 *Nobuaki Ito*, Div. of Therapeutic, Dept. for Intractable Bone Diseases,
 Graduate School of Medicine, The Univ. of Tokyo...S1076

10 : 30 ~ 11 : 30	Instructional lecture 58	Moderator M. Hongo
--------------------------	---------------------------------	---------------------------

4-6-EL58 Mechanisms of bone fragility and therapeutic strategies for osteoporosis unraveled through
 bone microarchitecture analysis *Ko Chiba, et al.*, Dept. of Orthop. Surg.,
 Nagasaki Univ. Graduate School of Biomedical Sciences...S1077

12 : 00 ~ 13 : 10	Luncheon seminar 41	Moderator K. Sairyo
--------------------------	----------------------------	----------------------------

4-6-LS41 Generative AI × The forefront of clinical practice and research
 *Tomohiro Sonoo*, TXP Medical Co. Ltd...S1077

13 : 25 ~ 14 : 45	JOA Directors' proposed symposium 16	Moderators T. Saito, H. Mera
Current status of stem cell therapy development for joint diseases in Japan		

4-6-JS16-1 Identification of stem cell fractions from MSCs contributing to osteochondral regeneration
 *Takeshi Teramura*, Institute of Advanced Clinical Medicine, Kindai Univ. Hosp...S1078

4-6-JS16-2 Development of articular cartilage regeneration therapy by mesenchymal stem cell
 magnetic targeting *Naosuke Kamei, et al.*, Div. of Orthop. Surg.,
 Dept. of Medicine of Sensory and Motor Organs, Faculty of Medicine, Univ. of Miyazaki...S1078

4-6-JS16-3 Current status and challenges of synovial mesenchymal stem cell therapy for
 knee osteoarthritis *Kentaro Endo, et al.*, Center for Stem Cell and Regenerative Medicine,
 Institute of Science Tokyo...S1079

4-6-JS16-4 Therapeutic potential of adipose-derived mesenchymal stromal cell for osteoarthritis:
 Overview of clinical and basic study *Tomoyuki Matsumoto, et al.*, Dept. of Orthop. Surg.,
 Kobe Univ. Graduate School of Medicine...S1079

4-6-JS16-5 Molecular mechanisms of mesenchymal stem cell therapy for osteoarthritis
 *Taro Kasai, et al.*, Dept. of Orthop. Surg., The Univ. of Tokyo...S1080

4-6-JS16-6 Treatment for cartilage defect of the knee joint with autologous bone marrow-derived MSCs:
 A multicenter prospective randomized control clinical trial
 *Yusuke Hashimoto, et al.*, Dept. of Sport Sciences,
 The Univ. of Osaka of Health and Sport Sciences...S1080

14 : 50 ~ 15 : 40	Free papers 86 Pediatric fracture	Moderators T. Saisu, N. Saka
--------------------------	--	-------------------------------------

4-6-1 Comparison before and after the start of the use of ESIN for pediatric lower limb fractures
 *Shun Fukushima, et al.*, Dept. of Orthop. Surg., Graduate School of Medicine, Chiba Univ...S1081

4-6-2 Treatment of fingertip amputations in children by Brent's and modified Brent's method
 *Koichiro Yanai, et al.*, Shonan Kamakura General Hosp...S1081

4-6-3 Acute management of pediatric Monteggia fracture
 *Yasuaki Okada, et al.*, Saitama Jikei Hosp. Saitama Hand & Microsurgery Institute...S1082

4-6-4 The prevalence and factors of postoperative fracture-related infection in pediatric upper
 extremity fracture
 *Masayoshi Machida, et al.*, Dept. of Orthop. Surg., Saitama Children's Medical Center...S1082

4-6-5 Finite element analysis of Kirschner wire fixation techniques aimed at preventing ulnar nerve
 injury in pediatric supracondylar humerus fractures
 *Masato Nakadai, et al.*, Dept. of Orthop. Surg., Niigata Univ. Medical & Dental Hosp...S1083

4th Day May 24 Room 7

8 : 00 ~ 9 : 00 Instructional lecture 59 Moderator T. Kojima

4-7-EL59 The history of rheumatoid arthritis and its treatment
 *Jinju Nishino*, Dept. Orthop. Surg., Towa Hosp.···S1084

9 : 15 ~ 10 : 15 Instructional lecture 60 Moderator Y. Mochida

4-7-EL60 The current situation of the rheumatoid arthritis treatment by the orthopedists and the role we
 should fulfil from now on *Yuho Kadono*, Dept. of Orthop. Surg., Saitama Medical Univ.···S1084

10 : 30 ~ 11 : 30 Free papers 87 Moderators T. Mochizuki, H. Shitara
Shoulder dislocation/miscellaneous

4-7-1 The impact of remplissage for recurrent anterior shoulder instability on postoperative range of
 motion and rotator cuff elasticity *Yoshimasa Saigo, et al.*, Juntendo Univ. Hosp.···S1085

4-7-2 Screw angle and graft healing in arthroscopic iliac bone grafting for shoulder instability
 *Naori Akamine, et al.*, Funabashi Orthop. Hosp.···S1085

4-7-3 Comparison of postoperative results with and without capsular repair in the Latarjet procedure
 *So Taniguchi, et al.*, Dept. of Orthop. Surg., Ishikiriseiki Hosp.···S1086

4-7-4 A myoelectric prosthesis with multiple degrees of freedom using targeted muscle reinnervation for
 traumatic transhumeral amputees
 *Shinji Yoshida, et al.*, Dept. of Orthop. Surg., Surgical Science, Tokai Univ.···S1086

4-7-5 Capsulolabral attachments of the superior and anteroinferior capsule are the major pathological
 focus in frozen shoulder: PET analysis
 *Rei Kimura, et al.*, Dept. of Orthop. Surg., Tohoku Univ. Graduate School of Medicine···S1087

4-7-6 Comparison of humeral head position between sitting and supine MRI
 *Yasushi Takata, et al.*, Dept. of Orthop. Surg., Kanazawa Univ. Hosp.···S1087

12 : 00 ~ 13 : 10 Luncheon seminar 42 Moderator Y. Hirano

4-7-LS42-1 Recent trends in rheumatoid arthritis treatment that general orthopaedic surgeons should
 be aware of *Kosuke Ebina, et al.*, Dept. of Orthop. Surg.,
 Graduate School of Medicine, The Univ. of Osaka···S1088

4-7-LS42-2 Diagnosis and management of rheumatic diseases for general orthopaedic surgeons
 *Nobunori Takahashi*, Dept. of Orthop. Surg., Aichi Medical Univ.···S1088

13 : 25 ~ 14 : 25 Instructional lecture 61 Moderator A. Myoui

4-7-EL61 Development and implementation of a high-lubricity hip liner and ongoing development of an
 AI-assisted osteoporosis diagnostic system: Innovation in orthopaedics
 *Toru Moro*, Div. of Science for Joint Reconstruction,
 Graduate School of Medicine, The Univ. of Tokyo···S1089

14 : 40 ~ 15 : 40 Free papers 88 Moderators S. Takenaka, Y. Funauchi
Tumor: Miscellaneous

4-7-7 Treatment for bone and soft tissue sarcomas in the oldest-old patients
 *Takashi Ariizumi, et al.*, Div. of Orthop. Surg.,
 Dept. of Regenerative and Transplant Medicine,
 Niigata Univ. Graduate School of Medical and Dental Sciences···S1090

- 4-8-S59-4 Harnessing microRNAs to overcome inflammatory diseases
 *Hiroshi Asahara*, Dept. of Systems BioMedicine, Institute of Science Tokyo...S1097
- 4-8-S59-5 Development of antisense oligonucleotide-based therapy for Duchenne muscular dystrophy
 *Yoshitsugu Aoki*, Dept. of Molecular Therapy,
 National Institute of Neuroscience, National Center of Neurology and Psychiatry...S1098
- 4-8-S59-6 Current status and future outlook of nucleic acid drug development: Toward realizing
 personalized medicine to address unmet medical needs
 *Kumiko Ui-tei*, TIDE Center, Institute of Science Tokyo...S1098

10 : 40 ~ 11 : 30	Free papers 90	Moderators T. Yamamoto, G. Motomura
Joint preserving surgery: Femur		

- 4-8-7 Mid-term results of patient-oriented evaluation of curved intertrochanteric varus osteotomy
 *Ryo Inoue, et al.*, Dept. of Orthop. Surg., Yakumo General Hosp...S1099
- 4-8-8 Total hip arthroplasty after curved intertrochanteric varus osteotomy for osteonecrosis of the
 femoral head *Kimihiko Oono, et al.*, Dept. of Orthop./Rheumatology,
 Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine,
 Graduate School of Medicine, Nagoya Univ...S1099
- 4-8-9 Can sagittal necrosis extent assessment become a new indication for curved intertrochanteric
 varus osteotomy in osteonecrosis of the femoral head?
 *Yusuke Osawa, et al.*, Dept. of Orthop./Rheumatology,
 Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine,
 Graduate School of Medicine, Nagoya Univ...S1100
- 4-8-10 Prognostic impact of tracer uptake on SPECT/CT after anterior rotational osteotomy for femoral
 head osteonecrosis *Daiki Hama, et al.*, Dept. of Orthop. Surg.,
 Clinical Medicine, Graduate School of Medical Sciences, Kyushu Univ...S1100
- 4-8-11 Clinical outcomes of navigation assisted transtrochanteric rotational osteotomy in osteonecrosis
 of the femoral head *Yusuke Osawa, et al.*, Dept. of Orthop./Rheumatology,
 Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine,
 Graduate School of Medicine, Nagoya Univ...S1101

12 : 00 ~ 13 : 10	Luncheon seminar 43	Moderator H. Ishibashi
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- 4-8-LS43 Obesity disease: Recent research progress and brand-new drug therapies
 *Hiroaki Masuzaki*, Second Dept. of Internal Medicine,
 Endocrinology, Diabetes and Metabolism, Hematology, Rheumatology,
 Graduate School of Medicine, Univ. of the Ryukyus...S1102

13 : 25 ~ 14 : 45	Symposium 60	Moderators M. Moriyama, H. Yamashita
Musculoskeletal checkup: 10 years later		

- 4-8-S60-1 Challenges and future considerations regarding school medical examinations
 *Rika Akahoshi*, Ministry of Education, Culture, Sports, Science and Technology...S1103
- 4-8-S60-2 The impact of musculoskeletal screening on school health medical examinations
 *Sei Yumikura*, Japan Society of School Health...S1103
- 4-8-S60-3 Reflecting on 10 years of musculoskeletal screening: The role of Yogo teachers in connecting
 families, schools, and medical care *Chie Mochiduki*, Minobu Town Junior High School...S1104
- 4-8-S60-4 Outcomes and issues of musculoskeletal screening examination for school-age children:
 Based on results from 2007 in Miyazaki prefecture
 *Etsuo Chosa*, Junwakai Memorial Hosp./Univ. of Miyazaki...S1104
- 4-8-S60-5 The school medical examination for locomotive organ from the JCOA 10-year survey results
 *Sadao Arai*, Arai Orthop. Clinic...S1105

14 : 50 ~ 15 : 40 Free papers (English) 91

Moderators A. Hara, Y. Yoshii

Upper extremities

- 4-8-12 Subscapularis repair enhances internal rotation in French but not Japanese patients after a short-typed curved stem reverse shoulder arthroplasty
..... *Yoshihiro Hirakawa, et al.*, Ishikiriseiki Hosp. ...S1106
- 4-8-13 Efficacy of local infiltration anesthesia versus interscalene block for postoperative pain control after arthroscopic rotator cuff surgery: A non-inferiority trial
..... *Thawathit Thangtamniyom*, Dept. of Orthop.,
Srinagarind Hosp., Khon Kaen Univ., Khon Kaen, Thailand ...S1106
- 4-8-14 Thickening of the middle glenohumeral ligament as a risk factor for subscapularis tendon tears: An arthroscopic analysis
..... *Piyachat Thongthanthum, et al.*, Dept. of Orthop. Surg., KKU, SNH, Khon Kaen, Thailand ...S1107
- 4-8-15 Association of trapezium morphology with primary treatment failure in acute traumatic thumb carpometacarpal joint dislocation *Ken Nishimura, et al.*, Dept. of Orthop. Surg., Mayo Clinic ...S1107
- 4-8-16 Parallel vs. orthogonal plating for the intraarticular distal humerus fractures with a coronal shear fragment *Gaku Niitsuma, et al.*, Dept. of Orthop. Surg., Showa Medical Univ. ...S1108

4th Day May 24 Room 9

8 : 00 ~ 9 : 00 Free papers 92

Moderators A. Sudo, A. Tominaga

Osteoporosis: Pharmacotherapy

- 4-9-1 Effectiveness of romosozumab following raloxifene in primary osteoporosis: An observational study *Kazuaki Mineta, et al.*, Dept. of Orthop. Surg., Tokushima Kensei Hosp. ...S1109
- 4-9-2 Predictors of vertebral fractures in patients with severe osteoporosis
..... *Hiroyuki Inose, et al.*, Dept. of Orthop. Surg., Dokkyo Medical Univ. Saitama Medical Center ...S1109
- 4-9-3 Cardiovascular safety and fracture prevention effectiveness of denosumab versus oral bisphosphonates in patients receiving dialysis: A target trial emulation
..... *Soichiro Masuda, et al.*, Dept. of Pharmacoepidemiology, Kyoto Univ. ...S1110
- 4-9-4 Caution is required regarding hypercalciuria in osteoporosis treatment
..... *Takashi Nagai, et al.*, Dept. of Rehabilitation Medicine, Showa Medical Univ. ...S1110
- 4-9-5 Age-related response to 12-month romosozumab in Japanese women aged 55-100 years with primary osteoporosis
..... *Takaomi Kobayashi, et al.*, Education and Research Center for Community Medicine,
Faculty of Medicine, Saga Univ. ...S1111
- 4-9-6 Long-term low-dose colchicine therapy for patients with difficult-treated calcium pyrophosphate crystal-induced arthritis *Tomomitsu Hashiguchi, et al.*, Hashiguchi Orthop. Clinic ...S1111

9 : 15 ~ 10 : 15 Invited lecture 26 (English)

Moderator S. Takai

- 4-9-IL26-1 Geriatric fracture care: Challenges, strategies, and Taiwanese insights
..... *Po-Ting Wu*, Dept. of Orthop., College of Medicine,
National Cheng Kung Univ., Tainan, Taiwan ...S1112
- 4-9-IL26-2 Development of robotic technology in total knee arthroplasty and its role in a super-aging society *Yasushi Oshima*, Dept. of Orthop. Surg.,
Field of Surg., Nippon Medical School, Graduate School of Medicine ...S1112

10 : 30 ~ 11 : 30 **Free papers (English) 93** **Basic research** **Moderators** **K. Horiuchi, S. Ichihara**

- 4-9-7 Integrative transcriptomic analysis identifies convergent inflammatory pathways linking osteoarthritis cartilage degeneration and depression through shared immune-metabolic dysregulation across human tissues
 *Rini Winarti, et al.*, Dept. of Biology, Yogyakarta State Univ., Sleman, Indonesia...S1113
- 4-9-8 Transferrin receptor 1 (TfR1) as a potential therapeutic target in arthritis
 *Tsunemasa Kita, et al.*, Div. of Orthop. Surg.,
 Dept. of Medicine of Sensory and Motor Organs, Faculty of Medicine, Univ. of Miyazaki...S1113
- 4-9-9 Differential expression of PIEZO1, PIEZO2, and TRPV4 in hip, knee, and ankle cartilage and their association with osteoarthritis *Ryuichiro Okuda, et al.*, Dept. of Orthop. Surg.,
 Science of Functional Recovery and Reconstruction, Faculty of Medicine,
 Dentistry, and Pharmaceutical Sciences, Okayama Univ...S1114
- 4-9-10 Effects of lunar gravity on osteocytes and chondrocytes in the osteochondral unit
 *Keita Nagira, et al.*, Dept. of Orthop. Surg., Tottori Univ...S1114
- 4-9-11 ADME and mechanistic analysis of *Allium cepa* (tamanegi) phytochemicals for anti-osteoporotic activity *Pankaj Kumar Yadav*, Dept. of Pharmacy, RIPANS, Aizawl, India...S1115
- 4-9-12 Hyaluronic acid injection modulates neovascularization, fibrosis, and collagen composition in a rat model of patellar tendinopathy *Naoki Takemoto, et al.*, Dept. of Orthop. Surg.,
 Graduate School of Medical Sciences, Kanazawa Univ...S1115

13 : 25 ~ 14 : 25 **Free papers 94** **Moderators** **R. Oda, H. Sasaki**
Hand & elbow: Tendon/ligament

- 4-9-13 The extensor mechanism of the DIP joint: Continuity of the extensor tendon, skin, and joint capsule *Ryota Sugimura, et al.*, Dept. of Clinical Anatomy,
 Graduate School of Medical and Dental Sciences, Institute of Science Tokyo...S1116
- 4-9-14 Novel minimally invasive surgery combining endoscopic repair for zone I flexor tendon injuries
 *Takeru Yokota, et al.*, Dept. of East Shirakawa Orthop. Academy, Fukushima Medical Univ...S1116
- 4-9-15 Experimental evaluation of percutaneous A1 pulley release using an ultrasound probe handling arm (UPHA) *Yasuaki Nakanishi, et al.*, Center for Postgraduate Training, Nara Medical Univ...S1117
- 4-9-16 Evaluation of the utility of MRI FRACTURE in surgical planning
 *Narumi Maki, et al.*, Dept. of Orthop. Surg., Graduate School of Medicine, Chiba Univ...S1117
- 4-9-17 Clinical outcomes of arthroscopic transosseous vertical simple repair using SutureTape for TFCC foveal tears *Shiro Yoshida*, Dept. of Orthop. Surg., Kurume Univ...S1118
- 4-9-18 Progression of degenerative changes in lateral epicondylitis: Analysis using high-resolution MRI
 *Kazuhiro Ikeda, et al.*, Dept. of Orthop. Surg., Univ. of Tsukuba...S1118

14 : 40 ~ 15 : 40 **Free papers 95** **Moderators** **T. Murase, Y. Nakashima**
Hand: Imaging/miscellaneous

- 4-9-19 Investigation of structural changes in the middle phalanx associated with Heberden's nodes
 *Mika Akahane, et al.*, Dept. of Orthop. Surg.,
 Graduate School of Medical Sciences, Kanazawa Univ...S1119
- 4-9-20 Validity of tendon morphometry using FRACTURE MRI: A cadaveric comparison
 *Hiroataka Akezuma, et al.*, Dept. of Orthop. Surg., Graduate School of Medicine, Chiba Univ...S1119
- 4-9-21 Stabilizing effect of active index finger abduction on the thumb carpometacarpal joint: An ultrasonographic study
 *Takuma Naka, et al.*, Dept. of Orthop. Surg., Yokohama City Univ. Hosp...S1120
- 4-9-22 Clinical applications of photoacoustic 3D imaging in hand surgery
 *Katsuyasu Fukasawa, et al.*, Dept. of Orthop. Surg., Kanto Rosai Hosp...S1120

- 4-9-23 Association between psychological factors and postoperative upper limb function in hand surgery
 *Kazuhiro Kohata, et al.*, Dept. of Orthop. Surg., The Univ. of Tokyo Hosp., The Univ. of Tokyo...S1121
- 4-9-24 Factors associated with central sensitization inventory scores in patients with osteoarthritis of the
 thumb carpometacarpal joint *Shoichiro Ishii, et al.*, Dept. of Orthop., Juntendo Univ....S1121

4th Day May 24 Room 10

8 : 00 ~ 9 : 00 Free papers 96 Knee: Ligament 2 Moderators M. Nozaki, T. Suzuki

- 4-10-1 Risk factors for secondary anterior cruciate ligament (ACL) injury
 *Kazuya Okada, et al.*, Dept. of Orthop. Surg., JCHO Gunma Central Hosp....S1122
- 4-10-2 Effect of combined ACL and ALL reconstruction in ACL-injured knees with multiple secondary
 stabilizer injuries *Shunta Hanaki, et al.*, Dept. of Orthop. Surg., Nagoya City Univ. Hosp....S1122
- 4-10-3 Intraoperative and postoperative factors associated with poor patient-reported outcomes two
 years after ACL reconstruction: A multicenter study
 *Atsuo Nakamae, et al.*, Dept. of Orthop. Surg.,
 Graduate School of Biomedical and Health Sciences, Hiroshima Univ....S1123
- 4-10-4 Preoperative ACL-RSI is an independent assessment of psychological readiness without the
 influence of knee instability: Chiba LEAF Study
 *Yuki Yoshida, et al.*, Dept. of Orthop. Surg., Graduate School of Medicine, Chiba Univ....S1123
- 4-10-5 Patellar fracture associated with quadriceps tendon-bone graft harvest: Incidence and risk factors
 *Naohiro Uezono, et al.*, Dept. of Orthop. Surg., Kagoshima Univ. Hosp....S1124
- 4-10-6 Short-term clinical outcomes of anterior cruciate ligament reconstruction using quadriceps
 tendon autograft
 *Naoki Tsuto, et al.*, Dept. of Orthop. Surg., Hyogo Prefectural Rehabilitation Center Hosp....S1124

9 : 15 ~ 10 : 15 Free papers 97 Knee: OA 2 Moderators T. Sasho, S. Otsuki

- 4-10-7 Bone marrow lesion coexisted with subchondral bone lesions is associated with knee pain in
 knee osteoarthritis: The Bunkyo health study
 *Jun Tomura, et al.*, Dept. of Orthop., Juntendo Univ....S1125
- 4-10-8 A cross-sectional study on risk factors for knee osteoarthritis in the Iwaki Health Promotion
 Project using artificial intelligence
 *Ryo Tomita, et al.*, Dept. of Orthop. Surg., Hirosaki Univ. Graduate School of Medicine...S1125
- 4-10-9 Prediction of knee osteoarthritis progression using synovial fluid biomarkers
 *Koji Aso, et al.*, Dept. of Orthop. Surg., Kochi Medical School, Kochi Univ....S1126
- 4-10-10 Medial meniscus extrusion is a risk factor for progression of bone marrow lesion in knee
 osteoarthritis: The Bunkyo Health Study
 *Yo Kawashima, et al.*, Dept. of Orthop., Juntendo Univ....S1126
- 4-10-11 Locomotive syndrome and knee ultrasonographic findings in community residents: Impact of
 medial meniscus extrusion and meniscotibial ligament insufficiency
 *Hiroaki Tsukamoto, et al.*, Dept. of Orthop. Surg., Noshiro Kousei Medical Center...S1127
- 4-10-12 Association of bone mineral density and bone metabolism markers with the incidence of lower
 limb osteoarthritis in the general population
 *Ryoto Kura, et al.*, Dept. of Orthop. Surg., Hirosaki Univ. Graduate School of Medicine...S1127

10 : 30 ~ 11 : 30 Free papers 98 Meniscus Moderators T. Furumatsu, H. Kaneko

- 4-10-13 Diagnostic value of dynamic ultrasonography for medial meniscotibial ligament insufficiency
 *Takashi Kawaragi, et al.*, Dept. of Orthop. Surg., Noshiro Kousei Medical Center...S1128

- 4-10-14 Comparison of medial meniscus extrusion between medial meniscus posterior root tears and posterior horn tears in various knee positions
 *Haruhiko Nakamura, et al.*, Dept. of Orthop. Surg.,
 Saitama Medical Center, Saitama Medical Univ.··S1128
- 4-10-15 Morphological risk factors for medial meniscus posterior root tear: A comparative MRI study
 *Kensuke Hotta, et al.*, Dept. of Orthop. Surg., Hamamatsu Univ. School of Medicine··S1129
- 4-10-16 Timing of subchondral insufficiency fracture following medial meniscus posterior root tear: Concentration within 3 months
 *Hiroko Hoshi, et al.*, Dept. of Orthop. Surg., Japanese Narita Red Cross Hosp.··S1129
- 4-10-17 Efficacy of medialization pull-out suture for medial meniscus posterior root tear: A comparative study with anatomical attachment foramen
 *Naoki Sugita, et al.*, Dept. of Orthop. Surg., Saitama Medical Univ.··S1130
- 4-10-18 Meniscal centralization anchors inserted at the articular margin are less likely to fail than those inserted at the articular surface *Keiichi Yoshida, et al.*, Dept. of Orthop., Juntendo Univ.··S1130

12 : 00 ~ 13 : 10	Luncheon seminar 44	Moderator S. Tanaka
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- 4-10-LS44-1 How to diagnose and treat psoriatic arthritis; tips and pitfalls
 *Yuhō Kadono*, Dept. of Orthop. Surg., Saitama Medical Univ.··S1131
- 4-10-LS44-2 Tips for managing axial spondyloarthritis
 *Tetsuya Tomita*, Morinomiya Univ. of Medical Sciences,
 Graduate School of Health Sciences··S1131

14 : 40 ~ 15 : 40	Seminar for the physician teaching and managing the pediatric musculoskeletal disease	Moderator J. Takahashi
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- Practical considerations and key points in pediatric orthopaedic care
 *Yoshinobu Oka*, Dept. of Orthop. Surg., Japan Baptist Medical Foundation··S1132

4th Day May 24 Room 11

8 : 00 ~ 9 : 00	Free papers 99	Moderators T. Miura, S. Maeda
Basic research in nerves & shoulder		

- 4-11-1 Intravenous infusion of mesenchymal stem cells increased axonal signal intensity in the rubrospinal tract in spinal cord injury
 *Ryosuke Hirota, et al.*, Dept. of Orthop. Surg., Sapporo Medical Univ.··S1133
- 4-11-2 Modified Masquelet technique with artificial nerves coated with PTFE membrane coated: A novel approach for nerve regeneration
 *Masao Suzuki, et al.*, Dept. of Orthop. Surg., Juntendo Univ. Urayasu Hosp.··S1133
- 4-11-3 Astrocyte-specific APOE4 deletion attenuates acute hyperexcitability and improves recovery after spinal cord injury *Tetsuhiko Mimura, et al.*, Dept. of Orthop. Surg., Shinshu Univ.··S1134
- 4-11-4 Investigating the pain-inhibiting effects of milogabalin and diclofenac combination therapy in a rat model of osteoarthritis of the hip
 *Akito Nagai, et al.*, Dept. of Orthop. Surg., Graduate School of Medicine, Chiba Univ.··S1134
- 4-11-5 Capsuloligamentous complex more crucial than long head of biceps for humeral migration and deformation in rat CTA model *Kohei Uekama, et al.*, Dept. of Orthop. Surg.,
 Graduate School of Medical and Dental Sciences, Kagoshima Univ.··S1135
- 4-11-6 Anti-RANKL antibody administration suppresses cuff tear arthropathy changes in mice
 *Yusuke Masuda, et al.*, Dept. of Orthop. Surg.,
 Graduate School of Medical and Dental Sciences, Kagoshima Univ.··S1135

9 : 15 ~ 10 : 15 Free papers 100 Biomechanics Moderators M. Bessho, K. Kono

- 4-11-7 Combination of pressed biceps tendon augmentation and antioxidant enhances attachment strength in a rat rotator cuff tear model
 *Fumitoshi Hatae, et al.*, Dept. of Orthop. Surg., Juntendo Univ. Urayasu Hosp.··S1136
- 4-11-8 Normalization of subchondral bone density patterns after surgical treatment for capitellar osteochondritis dissecans: A quantitative analysis
 *Satoshi Miyamura, et al.*, Dept. of Orthop. Surg.,
 Graduate School of Medicine, The Univ. of Osaka··S1136
- 4-11-9 Biomechanical evaluation of fixation strength of oversized pedicle screws: Relationship with pedicle diameter *Hiroaki Manabe, et al.*, Dept. of Orthop. Surg., Tokushima Univ. Hosp.··S1137
- 4-11-10 Impact of gait pain on walking biomechanics in patients with knee osteoarthritis: An investigation using intra-articular xylocaine injection
 *Tomotoshi Nishimori, et al.*, Dept. of Orthop. Surg., Kochi Medical School Hosp.··S1137
- 4-11-11 Hindfoot compensation for coronal knee malalignment in 1,000 limbs of community-dwelling older adults *Masaya Takemiya, et al.*, Dept. of Orthop. Surg., Chiba Univ. Hosp.··S1138
- 4-11-12 Strain analysis of pin sites in temporary external fixation model of the ankle joint using the digital image correlation method
 *Yuka Kobayashi, et al.*, Dept. of Orthop. Surg., Tokai Univ., Hachioji Hosp.··S1138

10 : 30 ~ 11 : 30 Free papers 101 Moderators T. Majima, T. Nagura
Knee: Cartilage/miscellaneous

- 4-11-13 The effect of cell characteristics of cultured cartilage on clinical outcomes in autologous cultured cartilage implantation
 *Kazuhiko Saeki, et al.*, Fukuoka International Univ. of Health and Welfare··S1139
- 4-11-14 Long-term results of autologous osteochondral plugs in mosaicplasty
 *Yasuaki Nakagawa, et al.*, Dept. of Orthop. Surg., Japan Baptist Medical Foundation··S1139
- 4-11-15 Five-year longitudinal study of clinical outcomes and MRI morphological evaluation after autologous cultured cartilage (JACC) transplantation: CaTCh study
 *Masaki Tayama, et al.*, Dept. of Orthop. Surg., Chiba Univ. Hosp.··S1140
- 4-11-16 Association between anterior medial meniscal extrusion and bilateral OCD of the medial femoral condyle: A study of surgically treated cases *Masayoshi Deie, et al.*, Dept. of Orthop. Surg.,
 Graduate School of Biomedical and Health Sciences, Hiroshima Univ.··S1140
- 4-11-17 Diagnostic value of SPECT-CT for patellofemoral osteoarthritis: Comparison with X-ray and MRI
 *Yuki Ishigaki, et al.*, Dept. of Orthop. Surg., Akita Univ. Graduate School of Medicine··S1141
- 4-11-18 The influence of proximal tibial morphology on recurrent patellar dislocation
 *Kai Koiwa, et al.*, Dept. of Orthop. Surg., Marunouchi Hosp.··S1141

12 : 00 ~ 13 : 10 Luncheon seminar 45 Moderator S. Momohara

- 4-11-LS45 Ultrasound assessment in the treatment of rheumatoid arthritis and the clinical significance of Metoject subcutaneous injection
 *Tadashi Okano*, Center for Senile Degenerative Disorders,
 Osaka Metropolitan Univ. Graduate School of Medicine··S1142

13 : 25 ~ 14 : 25 Free papers 102 Scoliosis Moderators M. Takaso, K. Watanabe

- 4-11-19 Influence of lateral-translation of upper instrumented vertebra in posterior corrective surgery for adolescent idiopathic scoliosis with main-thoracic curve
 *Soya Miura, et al.*, Dept. of Orthop. Surg.,
 Faculty of Medicine and Graduate School of Medicine, Hokkaido Univ.··S1143

- 4-11-20 Factors influencing 2 years postoperative satisfaction in posterior spinal fusion for adolescent idiopathic scoliosis in Lenke type 1 and 2
 *Takuma Fukuzawa, et al.*, Dept. of Orthop. Surg., Shinshu Univ. Hosp.···S1143
- 4-11-21 Distal adding-on is a risk factor for unfused lumbar disc degeneration 10 years after surgery in adolescents thoracic idiopathic scoliosis
 *Satoshi Suzuki, et al.*, Dept. of Orthop. Surg., Keio Univ.···S1144
- 4-11-22 Facet joint asymmetry and structural curves in Lenke type 5 and 6 adolescent idiopathic scoliosis: Implications for fusion level selection
 *Masaya Mizutani, et al.*, Dept. of Orthop. Surg., Chiba Univ. Hosp.···S1144
- 4-11-23 The growing rod technique for early-onset scoliosis: Risk factor-based strategies and clinical outcomes *Kota Watanabe, et al.*, Dept. of Orthop. Surg., Keio Univ.···S1145
- 4-11-24 Temporal changes in hip joint space narrowing after spinal fusion in young patients with scoliosis *Naoya Fujimaru, et al.*, Dept. of Orthop. Surg.,
 Graduate School of Medical Sciences, Kanazawa Univ.···S1145

14 : 40 ~ 15 : 40	Free papers 103	Spinal instrumentation	Moderators	H. Takahashi, T. Ono
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- 4-11-25 Mixed reality-guided pedicle screw placement: A cadaveric study comparing accuracy across spinal levels *Masayuki Ohashi, et al.*, Div. of Orthop. Surg.,
 Dept. of Regenerative and Transplant Medicine,
 Niigata Univ. Graduate School of Medical and Dental Sciences···S1146
- 4-11-26 Dynamic characteristics and screw loosening prevention of a novel posterior spinal stabilization system with polyethylene articulating surfaces
 *Koji Matsumoto, et al.*, Dept. of Orthop. Surg., Nihon Univ. Itabashi Hosp.···S1146
- 4-11-27 Teriparatide acetate improves the Hounsfield unit value: CT evaluation using metal artifact reduction in patients after spinal fusion surgery
 *Norihiko Takegami, et al.*, Dept. of Musculoskeletal Surg.,
 Dept. of Multimodality Therapy for Cancer, Mie Univ. Graduate School of Medicine···S1147
- 4-11-28 O-Arm Navigation versus conventional fluoroscopy for the treatment of fragile pelvic ring fractures: A comparative study *Hiroki Konuma, et al.*, Dept. of Orthop. Surg.,
 Dokkyo Medical Univ. Saitama Medical Center···S1147
- 4-11-29 Does the number of pedicle screws affect structural stability in multi level anterior interbody fusions?: A CT/finite element analysis
 *Yoh Kumano, et al.*, Dept. of Spine Surg., JCHO Tokyo Yamate Medical Center···S1148
- 4-11-30 Evaluation of the indications and efficacy of spinal fusion with cages for pyogenic osteomyelitis
 *Tetsuto Yamaura, et al.*, Dept. of Orthop. Surg., Hyogo Medical Univ.···S1148

4th Day	May 24	Room 12
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8 : 00 ~ 9 : 00	Free papers 104	Spine: Elderly	Moderators	K. Nishida, N. Hara
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- 4-12-1 Risk factors for subsequent vertebral fractures following early balloon kyphoplasty
 *Ryo Taiji, et al.*, Dept. of Orthop. Surg., Wakayama Medical Univ. Kihoku Hosp.···S1149
- 4-12-2 An 8-year longitudinal cohort study of common degenerative spinal disorders among elderly population *Tetsuya Kobayashi, et al.*, Dept. of Orthop. Surg., Asahikawa Medical Univ.···S1149
- 4-12-3 Association between gait prognosis after osteoporotic vertebral fractures and anisocytosis
 *Yoshihito Sakai, et al.*, Dept. of Orthop. Surg., National Center for Geriatrics and Gerontology···S1150
- 4-12-4 Alignment-based indications for corrective floating fusion in osteoporotic vertebral fracture-related kyphosis *Yuta Sawada, et al.*, Dept. of Orthop. Surg.,
 Osaka Metropolitan Univ. Graduate School of Medicine···S1150

- 4-12-5 The impact of romosozumab administration as an adjuvant therapy on osteoporotic spine: Spinous process and iliac bone histomorphometry
 *Kimihiko Sawakami, et al.*, Dept. of Orthop. Surg., Tominaga-Kusano Hosp.···S1151
- 4-12-6 Frailty as an independent predictor of non-home discharge after adult spinal deformity surgery using lateral interbody fusion in older patients
 *Shunji Tsutsui, et al.*, Dept. of Orthop. Surg., Wakayama Medical Univ.···S1151

9 : 15 ~ 10 : 15	Free papers 105 AI: Spine 2	Moderators K. Takeshita, H. Oka
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- 4-12-7 Evaluation of optimal endoscopic position and superior articular process resection in full-endoscopic discectomy using AI-assisted 3D MRI/CT fusion images
 *Daisuke Ukeba, et al.*, Dept. of Orthop. Surg., Faculty of Medicine and Graduate School of Medicine, Hokkaido Univ.···S1152
- 4-12-8 CNN-based diagnosis of fresh osteoporotic vertebral fractures: Accuracy of a model trained on sitting-supine radiographs validated with flexion-extension images
 *Tomonori Morita, et al.*, Dept. of Orthop. Surg., Sapporo Medical Univ.···S1152
- 4-12-9 Evaluation of obstructive factors in full-endoscopic transforaminal approach at L5/S1 using 3D-MRI/CT simulation: Comparative age and gender 208 cases
 *Tomoya Sato, et al.*, Dept. of Orthop. Surg., Faculty of Medicine and Graduate School of Medicine, Hokkaido Univ.···S1153
- 4-12-10 Comparative performance of machine learning models for osteoporosis prediction using lumbar CT-derived Hounsfield units
 *Akihiko Hiyama, et al.*, Dept. of Orthop. Surg., Surgical Science, Tokai Univ.···S1153
- 4-12-11 Pelvic incidence significantly correlates with facet joint orientation: A pilot three-dimensional analysis using VINCENT and Python
 *Koki Kato, et al.*, Dept. of Orthop. Surg., Div. of Disease Control, Research field of Medical Sciences, Graduate School of Medicine, Gifu Univ.···S1154
- 4-12-12 A new classification of intervertebral disc degeneration using artificial intelligence
 *Hisataka Suzuki, et al.*, Dept. of Orthop. Surg., Kushiro City General Hosp.···S1154

10 : 30 ~ 11 : 30	Instructional lecture 62	Moderator K. Okada
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- 4-12-EL62 Ensuring safe and mutually satisfactory medical care: The role of physicians
 *Tomotaka Yamamoto*, Office of Performance Monitoring and Risk Management, Univ. of Tokyo Hosp.···S1155

12 : 00 ~ 13 : 10	Luncheon seminar 46	Moderator H. Hagino
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- 4-12-LS46 The frontline of osteoporosis treatment: Based on the Osteoporosis Prevention and Treatment Guidelines 2025 *Satoshi Soen*, Soen Orthop., Osteoporosis and Rheumatology Clinic···S1155

13 : 25 ~ 14 : 25	Free papers 106	Moderators K. Miyamoto, C. Minamitani
Osteoporosis: Diagnosis		

- 4-12-13 Exploratory study on the utility of self-screening for osteoporosis
 *Jin Ikenaga, et al.*, Dept. of Orthop. Surg., Nagasaki Harbor Medical Center···S1156
- 4-12-14 Diagnostic utility of OSTA for osteoporosis in spinal surgery patients
 *Hirohito Hirata, et al.*, Dept. of Orthop. Surg., Saga Univ.···S1156
- 4-12-15 Aortic arch calcification as a novel indicator of low bone mineral density: Multicenter cross-sectional study *Narisaku Inada, et al.*, Dept. of Orthop. Surg., Kyorin Univ.···S1157
- 4-12-16 A clinical investigation of laboratory testing in orthopaedic practice for improving the diagnostic yield of tumor-induced osteomalacia and future perspectives
 *Hirokazu Tanaka, et al.*, Dept. of Orthop., Juntendo Univ.···S1157

- 4-12-17 Osteoporosis assessment in spine surgery patients: Association of femoral neck BMD, vertebral HU values, and aortic calcification *Takuya Nagai, et al.*, Div. of Orthop. Surg., Dept. of Medicine of Sensory and Motor Organs, Faculty of Medicine, Univ. of Miyazaki...S1158
- 4-12-18 Diagnostic accuracy of osteoporosis self-assessment tool for Asians (OSTA) by site: An AUC analysis in elderly Japanese women *Katsuya Yokoyama, et al.*, Div. of Orthop. Surg., Ebina Hosp....S1158

14 : 40 ~ 15 : 40 Free papers 107

Moderators T. Sawaguchi, F. Fukuda

Hip fracture 2: Epidemiology and nutrition

- 4-12-19 Risk factors and early onset predictors of contralateral hip fractures after initial surgery *Yuichiro Ukon, et al.*, Strategic Global Partnership & X-Innovation Initiative, Graduate School of Medicine, The Univ. of Osaka & The Univ. of Osaka Hosp....S1159
- 4-12-20 Survey of patients with hip fractures until 1 year by the JOS osteoporosis committee: A comparison of 2020 and 2023 *Satoshi Ikeda, et al.*, Ken-Ai Memorial Hosp. Orthop. Surg....S1159
- 4-12-21 Dedicated anaesthetists independently ensure surgery within 48 hours in patients aged 90 years and older with proximal femoral fractures *Shunsuke Sato, et al.*, Dept. of Orthop. Surg., Fukushima Medical Univ....S1160
- 4-12-22 Association between fracture type and nutritional status (GNRI): Malnutrition is more common in patients with trochanteric fractures *Daiki Ishimura, et al.*, Dept. of Orthop. Surg., HITO Hosp....S1160
- 4-12-23 Prevalence of hypozincemia and the effect of zinc supplementation in patients with hip fractures *Hironori Unno, et al.*, Dept. of Orthop. Surg., Iga City Hosp....S1161
- 4-12-24 Temporal changes in bone mineral density according to treatment type in patients following surgery for proximal femoral fractures *Go Sakai, et al.*, Dept. of Orthop. Surg., Komaki City Hosp....S1161

4th Day May 24 Room 13

8 : 00 ~ 9 : 00

Free papers 108 Osteoarthritis of the hip

Moderators K. Ueshima, T. Imagama

- 4-13-1 Prognostic factors for osteoarthritis progression in the other hip after transposition osteotomy of the acetabulum *Shiori Tanaka, et al.*, Dept. of Orthop. Surg., Ureshino Medical Center...S1162
- 4-13-2 Impact of family history in hip osteoarthritis: Multicenter cross-sectional study comparing hip osteoarthritis secondary to dysplasia and primary hip osteoarthritis *Soichiro Yoshino, et al.*, Dept. of Orthop. Surg., Clinical Medicine, Graduate School of Medical Sciences, Kyushu Univ....S1162
- 4-13-3 Borderline acetabular dysplasia in hip osteoarthritis: A nationwide multicenter descriptive study in Japan *Takeshi Utsunomiya, et al.*, Dept. of Orthop. Surg., Clinical Medicine, Graduate School of Medical Sciences, Kyushu Univ....S1163
- 4-13-4 Twenty-year study on age of hip osteoarthritis onset and joint survival in acetabular dysplasia using stratification based on LCEA *Ayano Amagami, et al.*, Dept. of Orthop. Surg., The Jikei Univ. School of Medicine...S1163
- 4-13-5 Uncovering morphological subgroups in primary hip osteoarthritis: UMAP-based clustering analysis *Toya Kawazu, et al.*, Dept. of Orthop. Surg., Clinical Medicine, Graduate School of Medical Sciences, Kyushu Univ....S1164
- 4-13-6 Association between decreased IGF2 levels in synovial tissue and pain indicators in end-stage hip osteoarthritis *Akira Norisugi, et al.*, Dept. of Orthop. Surg., Kitasato Univ....S1164

9 : 15 ~ 10 : 15 Free papers 109

Moderators H. Ito, N. Takahira

Joint preserving surgery: Acetabulum

- 4-13-7 Predictive factors for long-term joint preservation without osteoarthritic progression following transposition osteotomy of the acetabulum: Lessons from best-outcome cases
.....*Shiori Tanaka, et al.*, Dept. of Orthop. Surg., Ureshino Medical Center...S1165
- 4-13-8 Kinematic changes of the pelvis and lower limbs after periacetabular osteotomy:
A three-dimensional gait analysis study*Shinichi Ueki*, Dept. of Orthop. Surg.,
Graduate School of Biomedical and Health Sciences, Hiroshima Univ...S1165
- 4-13-9 Ten-year hip preservation rate after spherical periacetabular osteotomy: A survival analysis of
189 hips*Eiji Takahashi, et al.*, Dept. of Orthop. Surg., Kanazawa Medical Univ...S1166
- 4-13-10 What is the morphological factor associated with the long-term outcomes of periacetabular
osteotomy for acetabular dysplasia?
.....*Takafumi Miyata, et al.*, Dept. of Orthop. Surg., Kyushu Univ. Hosp...S1166
- 4-13-11 Clinical outcomes of conventional versus navigation guided periacetabular osteotomy in less
experienced surgeons*Yusuke Osawa, et al.*, Dept. of Orthop./Rheumatology,
Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine,
Graduate School of Medicine, Nagoya Univ...S1167
- 4-13-12 Long-term results of rotational acetabular osteotomy: Maximum 37-year, average 25-year survival
rate and risk factors for total hip arthroplasty (THA)
.....*Makoto Fukui, et al.*, Dept. of Orthop. Surg., Kanazawa Medical Univ...S1167

10 : 30 ~ 11 : 30 Free papers 110

Moderators T. Noda, K. Oae

Spinal and spinal cord injury/pelvic and acetabular fracture

- 4-13-13 Impact of surgical timing and comorbidities on ventilator dependency duration in cervical spinal
cord injury patients
.....*Koki Nakayama, et al.*, Advanced Center for Emergency and Critical Care Medicine,
Saitama Medical Center, Saitama Medical Univ...S1168
- 4-13-14 Impact of early surgery within 24 hours on outcomes in traumatic cervical spinal cord injury:
A propensity score-matched study
.....*Shizumasa Murata, et al.*, Dept. of Orthop. Surg., Wakayama Medical Univ...S1168
- 4-13-15 Influence of preoperative vertebral Hounsfield units on correction outcomes after posterior
fixation for thoracolumbar burst fractures
.....*Ryo Takatori, et al.*, Dept. of Orthop. Surg., Okayama Univ. Hosp...S1169
- 4-13-16 Posterior instrumentation using mono screws for thoracolumbar burst fractures:
Corrective power and prevention of correction loss
.....*Akihiko Tsukamoto, et al.*, Dept. of Orthop. Surg., Sapporo Medical Univ. Hosp...S1169
- 4-13-17 Evaluation of the utility of fluoroscopic stress radiographs of pelvis in the management of
fragility fractures of the pelvis
.....*Takahiro Oda, et al.*, Dept. of Orthop. Surg., Hyogo Prefectural Nishinomiya Hosp...S1170
- 4-13-18 Postoperative changes in mobility according to fracture pattern in pelvic injury patients aged
65 years and older*Masahiro Yoshida*, Dept. of Orthop. Surg., Aichi Medical Univ...S1170

12 : 00 ~ 13 : 10 Luncheon seminar 47

Moderator T. Kumai

- 4-13-LS47-1 Significance of subchondral bone lesions in knee osteoarthritis
.....*Koji Aso, et al.*, Dept. of Orthop. Surg., Kochi Medical School, Kochi Univ...S1171
- 4-13-LS47-2 Treatment strategies for subchondral bone lesions in knee osteoarthritis: From ESWT to
MSC therapy*Shinya Nakasato, et al.*, N Clinic...S1171

- 4-13-19 Factors associated with residual pelvic obliquity after total hip arthroplasty for dysplastic hip osteoarthritis: A retrospective observational study
*Hiroyuki Yokoi, et al.*, Dept. of Orthop. Surg., Nagoya Univ. Hosp.···S1172
- 4-13-20 Incidence of overhang exceeding 4 mm at the anterior aspect of the cup after total hip arthroplasty affects patients-reported outcomes ···*Takahiro Inoue, et al.*, Dept. of Orthop. Surg.,
 Clinical Medicine, Graduate School of Medical Sciences, Kyushu Univ.···S1172
- 4-13-21 Preoperative gluteal muscle volume and quality as predictors of functional recovery after total hip arthroplasty: A 3D CT-based analysis
*Yota Katsuyama, et al.*, Shonan Kamakura Joint Reconstruction Center···S1173
- 4-13-22 Safe direction and distance for acetabular reaming in total hip arthroplasty
*Masashi Ishida, et al.*, Dept. of Orthop.,
 Graduate School of Medical Science, Kyoto Prefectural Univ. of Medicine···S1173
- 4-13-23 Machine learning-based prediction of 1-year Harris hip score after total hip arthroplasty:
 Analysis of 8,715 cases using SHAP
*Yota Katsuyama, et al.*, Shonan Kamakura Joint Reconstruction Center···S1174
- 4-13-24 Thirty-five-year results after Charnley low-friction arthroplasty in patients less than fifty-five years old*Tadashi Teranishi, et al.*, Dept. of Orthop. Surg., Moriyama Hosp.···S1174

- 4-13-25 A relationship between the leg lengthening, global femoral offset and tibial rotation angle
*Norio Imai, et al.*, Div. of Comprehensive Musculoskeletal Medicine, Niigata Univ.···S1175
- 4-13-26 Long term outcomes of primary total hip arthroplasty using morselized bone grafting for DDH
*Keisuke Sano, et al.*, Dept. of Orthop. Surg.,
 Graduate School of Medical Sciences, Kanazawa Univ.···S1175
- 4-13-27 Preoperative physical performance and muscle quality as determinants of early independent ambulation after total hip arthroplasty
*Masanori Fujii, et al.*, Dept. of Orthop. Surg., Saga Univ. Hosp.···S1176
- 4-13-28 Dynamic change of cup angle associated with posture changes after THA using pelvic X-ray:
 Comparative analysis between hip-user and non-hip-user
*Tsunehito Ishida, et al.*, Dept. of Orthop. Surg., Tokyo Medical Univ.···S1176
- 4-13-29 Bone preservation advantage of h1 ceramic hip resurfacing over conventional metal-on-metal resurfacing*Yuki Yamamuro, et al.*, Dept. of Orthop. Surg.,
 Graduate School of Medical Sciences, Kanazawa Univ.···S1177
- 4-13-30 Accuracy of a novel head guide for anterior hip resurfacing
*Yuki Yamamuro, et al.*, Dept. of Orthop. Surg.,
 Graduate School of Medical Sciences, Kanazawa Univ.···S1177

4th Day May 24 Poster Room 1

- 4-Po-1 Accuracy of smart-watch assisted portable navigation system for total hip arthroplasty in supine position*Ryo Inokuchi, et al.*, Dept. of Orthop. Surg., Institute of Science Tokyo Hosp.···S1178
- 4-Po-2 Risk factors for iliac pin penetration in navigation-assisted total hip arthroplasty
*Yasutaka Masada, et al.*, Dept. of Orthop. Surg., Okayama Univ. Hosp.···S1178

- 4-Po-3 Validation of AR overlay accuracy in elbow arthroscopy: Comparison with preoperative 3D models *Hiroaki Iwase, et al.*, Div. of Human Enhancement & Hand Surg., Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine, Graduate School of Medicine, Nagoya Univ. ...S1179
- 4-Po-4 Development of an application using leap motion controller for quantitative evaluation of finger stiffness *Akari Mori, et al.*, Dept. of Orthop. Surg., Graduate School of Medical Sciences, Kanazawa Univ. ...S1179
- 4-Po-5 Clinical applications of FRACTURE sequence in orthopaedic surgery: Initial experience with CT-angiography like imaging for simultaneous bone and vascular visualization *Takahiro Yamazaki, et al.*, Dept. of Orthop. Surg., Graduate School of Medicine, Chiba Univ. ...S1180
- 4-Po-6 Morphological analysis of screw deviations in robot-assisted spine surgery: Proposal of the Shift and Skive classification *Atsuhiko Yoshida, et al.*, Dept. of Orthop. Surg., St. Marianna Univ. School of Medicine ...S1180
- 4-Po-7 Rapid fabrication of patient-specific spinal orthoses using a pellet-based 3D printer and digital scan data *Yuichi Tajima, et al.*, Dept. of Orthop. Surg., Ehime Univ. Graduate School of Medicine ...S1181

10 : 05 ~ 10 : 40	Poster presentation 44 AI	Moderator H. Mishima
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- 4-Po-8 Longitudinal changes in thigh muscle volume and density after proximal femoral fracture: An AI-CT analysis *Suguru Yokoo, et al.*, Dept. of Orthop. Surg., Fukuyama City Hosp. ...S1182
- 4-Po-9 A three-dimensional volumetric analysis of hip muscles: Fatty infiltration is associated with osteoarthritis severity *Akira Fujita, et al.*, Dept. of Orthop. Surg., Graduate School of Medicine, Kyoto Univ. ...S1182
- 4-Po-10 Trunk muscle quality as a predictor of locomotive syndrome improvement after total hip arthroplasty: Analysis using AI-based CT segmentation *Kohei Kono, et al.*, Dept. of Orthop. Surg., Ehime Univ. Graduate School of Medicine ...S1183
- 4-Po-11 Development and statistical validation of a machine learning model for predicting discharge functional outcomes after bipolar hip arthroplasty *Takehiro Kaneoka, et al.*, Dept. of Orthop. Surg., JCHO Tokuyama Central Hosp. ...S1183
- 4-Po-12 AI that determines whether a bone is cut based on chisel percussion sounds: Development of SPAI *Takahito Fujimori, et al.*, Dept. of Orthop. Surg., Graduate School of Medicine, The Univ. of Osaka ...S1184
- 4-Po-13 Artificial intelligence-enhanced dynamic digital radiography for accurate detection of bony landmarks during shoulder abduction *Issei Shinohara, et al.*, Dept. of Orthop. Surg., Kobe Univ. Hosp. ...S1184
- 4-Po-14 Canceled

10 : 55 ~ 11 : 30	Poster presentation 45 Perioperative complication	Moderator M. Inoue
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- 4-Po-15 Risk factors for intravenous cement leakage in cement-augmented pedicle screw fixation: A multicenter retrospective cohort study *Shota Tamagawa, et al.*, Dept. of Orthop., Juntendo Univ. ...S1186
- 4-Po-16 Number of remaining teeth can predict pedicle screw loosening after posterior lumbar interbody fusion (PLIF) *Kohei Shiota, et al.*, Dept. of Orthop. Surg., Hakodate Central General Hosp. ...S1186
- 4-Po-17 The impact of antithrombotic therapy on spinal surgery: A large-scale analysis using data from the Swedish National Spine Register *Ryo Fujita, et al.*, Dept. of Orthop. Surg., Faculty of Medicine and Graduate School of Medicine, Hokkaido Univ. ...S1187
- 4-Po-18 Preventive measures against postoperative nausea and vomiting (PONV) in spine surgery *Yushi Hoshino, et al.*, Dept. of Orthop. Surg., Asahi Univ. Hosp. ...S1187

- 4-Po-19 Prevalence and characteristics of postoperative delirium in geriatric spinal surgery (POD-GSS) in a single institute*Junichi Inoue, et al.*, Dept. of Orthop. Surg., Akita Rosai Hosp.··S1188
- 4-Po-20 Distal patellar HU value as a predictive risk factor for periprosthetic patellar fracture (PPPF)*Taiki Neyatani, et al.*, Dept. of Orthop. Surg., The Jikei Univ. School of Medicine··S1188
- 4-Po-21 Canceled

4th Day May 24 Poster Room 2

9 : 15 ~ 9 : 50 Poster presentation 46 Hand & elbow: Tendon/ligament/nerve	Moderator T. Ogawa
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- 4-Po-22 The usefulness of the WALANT surgery for subcutaneous rupture of extensor tendon associated with DRUJ disorder: Comparison with non-WALANT group*Mineyuki Zukawa, et al.*, Dept. of Orthop. Surg., Faculty of Medicine, Univ. of Toyama··S1190
- 4-Po-23 Treatment outcomes of tendon transfer and minimal ulna resection for extensor tendon rupture associated with DRUJ osteoarthritis under local anesthesia*Katsuhiko Tokutake, et al.*, Div. of Human Enhancement & Hand Surg., Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine, Graduate School of Medicine, Nagoya Univ.··S1190
- 4-Po-24 A new manual examination method for TFCC injury*Ikuma Kawai, et al.*, Dept. of Orthop. Surg., Uji-Takeda Hosp.··S1191
- 4-Po-25 Relationship between cardiac amyloidosis and carpal tunnel syndrome: The clinical value of pathological examination*Taishi Iwasaki, et al.*, Dept. of Orthop. Surg., Kirishima Orthop. Hosp.··S1191
- 4-Po-26 Amyloidosis screening in endoscopic carpal tunnel release surgery*Aya Yoshida, et al.*, Dept. of Orthop. Surg., Toride-Kitasouma Medical Association Hosp.··S1192
- 4-Po-27 Electrophysiological diagnosis for spontaneous anterior interosseous nerve lesions*Shingo Nobuta, et al.*, Dept. of Orthop. Surg., Tohoku Rosai Hosp.··S1192
- 4-Po-28 Clinical outcomes of oblique medial epicondylectomy for treatment of cubital tunnel syndrome*Shinsuke Morisaki, et al.*, Dept. of Orthop., Saiseikai Shiga Hosp.··S1193

10 : 05 ~ 10 : 40 Poster presentation 47 Hand & elbow joint	Moderator M. Nakasone
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- 4-Po-29 Anatomical study of nerve supply around thumb carpometacarpal joint*Toshifumi Maeyama, et al.*, Dept. of Orthop. Surg., Graduate School of Medicine, Chiba Univ.··S1194
- 4-Po-30 The clinical significance of intra-articular corticosteroid injection for the management of thumb carpometacarpal osteoarthritis*Kaoru Tada, et al.*, Dept. of Orthop. Surg., Kanazawa Univ. Hosp.··S1194
- 4-Po-31 Preoperative intra-articular steroid injections do not affect the surgical outcomes for thumb carpometacarpal osteoarthritis*Shingo Komura, et al.*, Gifu Prefecture Locomo Preventive Medicine Course, Gifu Univ.··S1195
- 4-Po-32 Suture-button suspensionplasty for thumb carpometacarpal arthritis: Comparison between arthroscopic and open partial trapeziectomy*Yasuhiro Kiyota, et al.*, Dept. of Orthop. Surg., Keio Univ.··S1195
- 4-Po-33 Postoperative outcomes of combined thumb carpometacarpal arthroplasty and metacarpophalangeal joint stabilization*Aiko Kishida, et al.*, Dept. of Orthop. Surg., Jujo Takeda Rehabilitation Hosp.··S1196
- 4-Po-34 Clinical experience of extracorporeal shock wave therapy for hand osteoarthritis*Kei Shimizu, et al.*, Rakan Clinic Tokyo Azabudai··S1196

- 4-Po-35 Effect of surgical position on neurovascular injury risk during elbow arthroscopy
 *Sho Yamauchi, et al.*, Dept. of Musculoskeletal Sports Medicine,
 Research and Innovation, Nagoya City Univ., Graduate School of Medical Sciences...S1197

10 : 55 ~ 11 : 30	Poster presentation 48 Pediatric orthopaedics	Moderator K. Mishima
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- 4-Po-36 Long term results of surgery for the foot deformity with spina bifida
 *Hiroshi Tanaka, et al.*, Dept. of Orthop. Surg.,
 National Rehabilitation Center for Children with Disabilities...S1198
- 4-Po-37 Influence of initial severity on flat-top-talus and navicular wedging deformities more than ten
 years after Ponseti treatment of congenital clubfoot
 *Kensuke Otsubo, et al.*, Dept. of Orthop., Shizuoka Children's Hosp...S1198
- 4-Po-38 Differences in the effect of surgical limb lengthening on gait in children with achondroplasia
 using 3D gait analysis
 *Keiichiro Mitsumoto, et al.*, Dept. of Orthop. Surg., Sapporo Medical Univ...S1199
- 4-Po-39 The therapeutic effect of orthopaedic selective spasticity-control surgery (OSSCS) on the
 shoulder joint in cerebral palsy
 *Mikio Terahara, et al.*, Dept. of Orthop. Surg., Kirishima Orthop. Hosp...S1199
- 4-Po-40 Comprehensive analysis of osteosarcoma referral letters: Insights into medical collaboration
 and diagnostic practices at our hospital
 *Kazuhiko Hashimoto, et al.*, Dept. of Orthop. Surg., Kindai Univ. Hosp...S1200
- 4-Po-41 Relationship between blurred boundary and neurological deficits in pediatric supracondylar
 humeral fractures *Takuji Yamamoto, et al.*, Dept. of Orthop. Surg., Kyushu Univ. Hosp...S1200
- 4-Po-42 Factors affecting activity of daily life in systemic juvenile idiopathic arthritis
 *Takahiro Fujimori, et al.*, Dept. of Orthop. Surg., Yokohama City Univ. Hosp...S1201

4th Day May 24 Poster Room 3

9 : 15 ~ 9 : 50	Poster presentation 49 Infection: General	Moderator S. Kawano
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- 4-Po-43 Prognostic utility of conventional clinical scores in predicting in-hospital mortality for
 necrotizing soft tissue infections: A multicenter retrospective TRON study
 *Hiroya Mizokami, et al.*, Dept. of Orthop. Surg., Kariya Toyota General Hosp...S1202
- 4-Po-44 Clinical characteristics and functional outcomes of necrotizing fasciitis in the upper extremity:
 A multicenter comparative study with the lower extremity
 *Tomoko Shibata, et al.*, Dept. of Orthop./Rheumatology,
 Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine,
 Graduate School of Medicine, Nagoya Univ...S1202
- 4-Po-45 Analysis of factors predicting the necessity of repeat debridements for septic arthritis
 *Masataka Sugii, et al.*, Dept. of Orthop. Surg., Tokyo Metropolitan Tama Medical Center...S1203
- 4-Po-46 Clinical investigation of high-concentrated local antibiotic periodic wound instillation therapy
 *Rikuo Shinomiya, et al.*, Dept. of Musculoskeletal Traumatology and Reconstructive Surg.,
 Graduate School of Biomedical and Health Sciences, Hiroshima Univ...S1203
- 4-Po-47 The utility of the BioFire® bone and joint infection panel in hand infections
 *Takeyasu Toyama, et al.*, Dept. of Orthop. Surg., Kansai Medical Univ. Hosp...S1204
- 4-Po-48 Examination of the usefulness of the FilmArray joint infection panel in orthopaedic infections
 *Satoshi Hisanaga, et al.*, Dept. of Orthop. Surg., Kumamoto Univ. Hosp...S1204
- 4-Po-49 The efficacy of alpha-defensin for diagnosis with pediatric septic arthritis
 *Masayoshi Machida, et al.*, Dept. of Orthop. Surg., Saitama Children's Medical Center...S1205

10 : 05 ~ 10 : 40	Poster presentation 50 Miscellaneous	Moderator M. Ohashi
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- 4-Po-50 Efficacy of skirt-like covering suture method for sciatic nerve defect repair in a rat model
 *Akira Ikumi, et al.*, Dept. of Orthop. Surg., Univ. of Tsukuba...S1206
- 4-Po-51 Ultrasound evaluation of hemophilic arthritis using HEAD-US
 *Hiroto Yamamoto, et al.*, Dept. of Orthop. Surg., Nagoya Univ. Hosp....S1206
- 4-Po-52 A 9-year analysis of atypical femoral fractures in patients with metastatic bone tumors on
 bone-modifying agents *Chiomi Shirai, et al.*, Dept. of Orthop. Surg., Yamagata Univ....S1207
- 4-Po-53 Risk factors for spinal alignment deterioration in community-dwelling adults: A 4-year
 longitudinal study *Ippei Yamauchi, et al.*, Dept. of Orthop./Rheumatology,
 Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine,
 Graduate School of Medicine, Nagoya Univ....S1207
- 4-Po-54 Radiation exposure in orthopaedic surgery: Is it really higher?
 *Itsuki Nagahata, et al.*, Dept. of Orthop. Surg., Yuri Kumiai General Hosp....S1208
- 4-Po-55 Work style reform for spine surgeons: Addressing postoperative complications after spine
 surgery by nurse practitioner (NP)
 *Tsuyoshi Kato, et al.*, Dept. of Orthop. Surg., Ome Medical Center...S1208
- 4-Po-56 A survey of unscheduled spine surgeries before and after work style reform
 *Yusuke Mimura, et al.*, Dept. of Orthop. Surg., Kitasato Univ....S1209

10 : 55 ~ 11 : 30	Poster presentation 51 Clinical safety & education	Moderator K. Tsuihiji
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- 4-Po-57 Preoperative polypharmacy and fall risk increasing drugs in patients with fragility fractures
 *Koh Terauchi, et al.*, Dept. of Orthop. Surg., St. Marianna Univ. School of Medicine...S1210
- 4-Po-58 The effect of minimizing physical restraints on in-hospital fall rates
 *Keika Nishi, et al.*, Dept. of Orthop. Surg., Shizuoka City Shizuoka Hosp....S1210
- 4-Po-59 A study of abdominal and pelvic lesions diagnosed on perioperative imaging in THA
 *Yuya Nagashima, et al.*, Dept. of Orthop. Surg., Saitama Medical Univ....S1211
- 4-Po-60 Current practices in implant ordering for fracture treatment: A survey of affiliated hospitals
 *Takeru Ohara, et al.*, Dept. of Orthop. Surg., Funabashi Municipal Medical Center...S1211
- 4-Po-61 Balance between overtime work and urgent surgery for proximal femoral fracture
 *Atsushi Fujie, et al.*, Dept. of Orthop. Surg., Keio Univ....S1212
- 4-Po-62 The effect of task shift to nurse practitioners in orthopaedic surgery
 *Kimitoshi Noto, et al.*, Dept. of Orthop. Surg., Daido Hosp....S1212
- 4-Po-63 Utilization of short movies as an orthopaedic education tool
 *Hiroaki Kijima, et al.*, Dept. of Orthop. Surg., Akita Univ. Graduate School of Medicine...S1213

4th Day May 24 e-Poster Booth 1
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8 : 25 ~ 9 : 00	e-Poster presentation 85	Moderator Y. Ishida
Locomotive syndrome: Related factors		

- 4-DP-1 Lower limb phase angle is an indicator for diagnosis of locomotive syndrome
 *Ikuko Takahashi, et al.*, Dept. of Orthop. Surg., Ishii Orthop. & Rehab. Clinic...S1214
- 4-DP-2 Association of forgotten joint score with locomotive syndrome, physical frailty and sarcopenia in
 patients after total knee replacement *Taisuke Nozu, et al.*, Dept. of Orthop. Surg.,
 Osaka Metropolitan Univ. Graduate School of Medicine...S1214
- 4-DP-3 Association between foot morphology and locomotive syndrome in community-dwelling
 older adults *Ryuuya Yamakawa, et al.*, Sports Medical Center, Hiroshima Univ. Hosp....S1215

- 4-DP-4 Effects of locomotion training-based outpatient rehabilitation on the whole-spine sagittal alignment in locomotive syndrome: A 2-year prospective cohort study
*Takashi Yurube, et al.*, Dept. of Orthop. Surg., Kobe Univ. Graduate School of Medicine...S1215
- 4-DP-5 Assessment of locomotive syndrome related physical function in female patients with rheumatoid arthritis of low disease activity
*Hiroto Yamamoto, et al.*, Dept. of Orthop. Surg., Nagoya Univ. Hosp...S1216
- 4-DP-6 Evaluation of discrepancies in loco-25 and 2-step test values among patients with rheumatoid arthritis*Hiroto Yamamoto, et al.*, Dept. of Orthop. Surg., Nagoya Univ. Hosp...S1216
- 4-DP-7 Locomotive syndrome in rheumatoid arthritis patients in the 6-year longitudinal study
*Yasumori Sobue, et al.*, Sobue Orthop. Clinic Yatomi...S1217

9 : 15 ~ 9 : 50	e-Poster presentation 86	Moderator N. Shima
Locomotive syndrome: Evaluation method 1		

- 4-DP-8 Association of spinal alignment with locomotive syndrome progression and HRQOL in a community-based cohort: The Yakumo study
*Yasuhiro Nagatani, et al.*, Dept. of Orthop./Rheumatology, Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine, Graduate School of Medicine, Nagoya Univ...S1218
- 4-DP-9 Differences in fat distribution between the trunk and buttocks affect locomotion
*Takashi Nagai, et al.*, Dept. of Rehabilitation Medicine, Showa Medical Univ...S1218
- 4-DP-10 Deep-learning pose-silhouette fusion for locomotive syndrome from single-camera gait video
*Junichi Kushioka, et al.*, Spine Center, Shonan Fujisawa Tokushukai Hosp...S1219
- 4-DP-11 Association between frailty assessed by mFI-5 and changes in locomotive syndrome before and after total knee arthroplasty*Shohei Shirakura, et al.*, Dept. of Orthop. Surg., Graduate School of Medical Science, Univ. of Yamanashi...S1219
- 4-DP-12 Relationship between psoas major muscle mass and bone mineral density, cognitive function, and activity in patients with proximal femoral fractures
*Hitoshi Kudo, et al.*, Dept. of Orthop. Surg., JCHO Akita Hosp...S1220
- 4-DP-13 Investigation of the factor affecting regaining walking ability after femoral neck fracture surgery
*Masatsugu Ozawa, et al.*, Dept. of Orthop. Surg., Sumitomo Besshi Hosp...S1220
- 4-DP-14 Association of sagittal spinal alignment with restricted shoulder elevation in a community-dwelling population
*Yuya Fukuda, et al.*, Dept. of Orthop. Surg., Fukushima Medical Univ...S1221

10 : 05 ~ 10 : 40	e-Poster presentation 87	Locomotive syndrome: Elderly	Moderator K. Kawate
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- 4-DP-15 Association between quadriceps muscle cross-sectional area measured by a newly ultrasonic system and sarcopenia: A longitudinal analysis in older adults
*Masaaki Onishi, et al.*, Dept. of Orthop. Surg., Hyogo Medical Univ...S1222
- 4-DP-16 Osteoarthritis of the knee and physical function in a resident cohort: Yakumo study
*Kazuki Yoshida, et al.*, Dept. of Orthop./Rheumatology, Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine, Graduate School of Medicine, Nagoya Univ...S1222
- 4-DP-17 Fracture site as a functional marker: A population-based analysis of frailty gradients in older adults
*Ryutaro Shibata, et al.*, Trauma and Reconstruction Center, Shin-Yurigaoka General Hosp...S1223

- 4-DP-18 Long-term consequences of mobility function on quality of life in middle-aged and older adults:
A longitudinal study of community residents
..... *Jun Ouchida, et al.*, Dept. of Orthop./Rheumatology,
Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine,
Graduate School of Medicine, Nagoya Univ.··S1224
- 4-DP-19 Associations of prior fracture site with physical function and daily living in independent older
adults: Insights from a community-based survey
..... *Makoto Ohoka, et al.*, Dept. of Orthop. Surg., Fujita Health Univ.··S1224
- 4-DP-20 Treatment burden-related factors following fractures at different anatomical sites:
A community-based cross-sectional study of older Japanese adults
..... *Soya Kawabata, et al.*, Dept. of Orthop. Surg., Fujita Health Univ.··S1224
- 4-DP-21 Evaluation of factors predicting health-related quality of life five years later based on the
longitudinal survey of musculoskeletal examinations
..... *Hideki Tashi, et al.*, Div. of Musculoskeletal Science for Frailty Niigata Univ.
Graduate School of Medical and Dental Sciences··S1225

10 : 55 ~ 11 : 30 e-Poster presentation 88
Locomotive syndrome: Evaluation method 2

Moderator T. Nishikawa

- 4-DP-22 Effectiveness of interpersonal coordinated walking processes with a virtual walking avatar for
improving disordered gait asymmetry
..... *Hiroataka Uchitomi, et al.*, Dept. of Computer Science, Institute of Science Tokyo··S1226
- 4-DP-23 Longitudinal changes in phase angle after total hip arthroplasty: Associations with muscle
strength and gait ability
..... *Kei Sasaki, et al.*, Dept. of Orthop. Surg., Yamaguchi Univ. Graduate School of Medicine··S1226
- 4-DP-24 Upper and lower trunk accelerometer-based metrics during gait as predictors of physical
function in older adults ··· *Takahiro Oki, et al.*, Rehabilitation Center, The Univ. of Tokyo Hosp.··S1227
- 4-DP-25 Factors influencing gait speed three years after total knee arthroplasty in patients with
end-stage knee osteoarthritis
..... *Akira Yamauchi, et al.*, Dept. of Orthop. Surg., Osaka Saiseikai Nakatsu Hosp.··S1227
- 4-DP-26 Knee strength increases after total knee arthroplasty for osteoarthritis and correlates with an
increase in lower extremity skeletal muscle mass
..... *Yoshiki Okamoto, et al.*, Dept. of Orthop. Surg., Osaka Saiseikai Nakatsu Hosp.··S1228
- 4-DP-27 An increase in post-operative peak knee adduction moment following robotic-assisted BCS TKA
is not necessarily associated with poor outcomes
..... *Kazuki Amemiya, et al.*, Ichinomiya Onsen Hosp.,
Adult Reconstruction & Sports Medicine Center··S1228
- 4-DP-28 Sarcopenia index-defined low skeletal muscle mass negatively affects functional outcomes after
total hip arthroplasty
..... *Yosuke Iwamoto, et al.*, Dept. of Orthop. Surg., Omagari Kosei Medical Center··S1229

4th Day May 24 e-Poster Booth 2

8 : 25 ~ 9 : 00 e-Poster presentation 89 Hip-spine

Moderator S. Hamai

- 4-DP-29 Lumbar fusion involving four or more levels reduces lumbar mobility, leading to an increase in
compensatory pelvic flexion and extension
..... *Toshiyuki Kawai*, Dept. of Orthop. Surg., Graduate School of Medicine, Kyoto Univ.··S1230

- 4-DP-30 The relationship between low back pain improvement by THA and pelvic motion
 *Tomoka Endo, et al.*, Dept. of Orthop. Surg.,
 Graduate School of Medical Science, Univ. of Yamanashi...S1230
- 4-DP-31 Lumbar lateral flexibility as a key factor for residual coronal pelvic obliquity after total
 hip arthroplasty *Hiroyuki Yokoi, et al.*, Dept. of Orthop. Surg., Nagoya Univ. Hosp....S1231
- 4-DP-32 Characteristics of patients with spinopelvic stiffness following total hip arthroplasty
 *Hiroyuki Tokuyasu, et al.*, Dept. of Rehabilitation, Kyoto City Hosp....S1231
- 4-DP-33 Changes in sagittal spinal alignment and pelvic stiffness after total hip arthroplasty
 *Shigeo Hagiwara, et al.*, Dept. of Orthop. Surg., Graduate School of Medicine, Chiba Univ....S1232
- 4-DP-34 The impact of spinal fusion including the pelvis on progression of hip osteoarthritis
 *Yuki Murakami, et al.*, Dept. of Orthop. Surg., Hamamatsu Univ. School of Medicine...S1232
- 4-DP-35 Preoperative factors associated with improvement of sagittal vertical axis after total
 hip arthroplasty
 *Yaichiro Okuzu, et al.*, Dept. of Orthop. Surg., Graduate School of Medicine, Kyoto Univ....S1233

9 : 15 ~ 9 : 50	e-Poster presentation 90 THA 5	Moderator A. Sato
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- 4-DP-36 Evaluation of the accuracy of femoral neck/stem anteversion using the virtual posterior
 condylar axis with intraoperative fluoroscopy in ALS THA
 *Eiji Osaka, et al.*, Dept. of Orthop. Surg., Kasukabe Medical Center...S1234
- 4-DP-37 A comparative study of modified Hardinge approach and OCM approach in early postoperative
 MRI findings and clinical outcomes following THA
 *Shuya Matsumoto, et al.*, Dept. of Orthop. Surg., Nishinomiya Kaisei Hosp....S1234
- 4-DP-38 Risk factors for greater trochanteric fractures in total hip arthroplasty using short taper wedge
 stems via the anterolateral supine approach
 *Eiji Cho, et al.*, Dept. of Orthop. Surg., Nihon Univ....S1235
- 4-DP-39 Comparison of short-term results between fracture traction tables and rotex-tables in total hip
 arthroplasty using anterolateral-supine approach
 *Yui Adachi, et al.*, Dept. of Orthop. Surg., National Center for Geriatrics and Gerontology...S1235
- 4-DP-40 Incidence and outcomes of greater trochanteric fractures in ALS-THA for hip osteoarthritis
 *Hirosuke Endo, et al.*, Dept. of Bone and Joint Surg., Kawasaki Medical School...S1236
- 4-DP-41 Patient factors enabling preservation of the ischiofemoral ligament during minimally invasive
 total hip arthroplasty *Yu Takeda*, Dept. of Orthop. Surg., Hyogo Medical Univ....S1236
- 4-DP-42 Intentional flexed insertion of the Actis stem in total hip arthroplasty via the anterolateral
 supine approach *Yusuke Kohno, et al.*, Dept. of Orthop. Surg., JCHO Kyushu Hosp....S1237

10 : 05 ~ 10 : 35	e-Poster presentation 91	Moderator Y. Maeda
Hip joint: Navigation/miscellaneous		

- 4-DP-43 Accuracy verification of the change of leg length and offset with portable CT-based navigation in
 total hip arthroplasty *Ryo Sugama, et al.*, Dept. of Orthop. Surg.,
 Osaka Metropolitan Univ. Graduate School of Medicine...S1238
- 4-DP-44 Educational effects of using inertial portable navigation in total hip arthroplasty
 *Koki Abe, et al.*, Musculoskeletal Science,
 Yokohama City Univ. Graduate School of Medicine...S1238
- 4-DP-45 Accuracy for the pelvic tilting of AR Hip Navigation for total hip arthroplasty to the lateral
 decubitus position *Keisuke Hoshino, et al.*, Dept. of Orthop. Surg., Kainan Hosp....S1239
- 4-DP-46 Clinical outcomes after rotational acetabular osteotomy using CT-based navigation
 *Kazuma Takashima, et al.*, Dept. of Orthop. Surg.,
 Graduate School of Medicine, The Univ. of Osaka...S1239

- 4-DP-47 Virtual simulation of excess bone resection in total hip arthroplasty using patient-specific 3D CT models*Kosuke Sumi, et al.*, Dept. of Orthop. Surg., Yokohama City Univ. Hosp.···S1240
- 4-DP-48 Horizontal reference definitions in functional pelvic plane affect cup positioning and leg length restoration in THA*Atsushi Sakagami*, Dept. of Orthop. Surg., Niigata Bandai Hosp.···S1240

10 : 55 ~ 11 : 30 e-Poster presentation 92

Moderator T. Goto

Hip joint: Evaluation of the images

- 4-DP-49 Impact of osteotomy rotation center position on postoperative outcomes after rotational acetabular osteotomy*Takeshi Shoji, et al.*, Dept. of Orthop. Surg., Hiroshima Univ. Hosp.···S1241
- 4-DP-50 Risk factors for delayed pubic union after eccentric rotational acetabular osteotomy*Shinya Tanaka, et al.*, Dept. of Orthop./Rheumatology, Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine, Graduate School of Medicine, Nagoya Univ.···S1241
- 4-DP-51 Abnormal joint loading stress induced by superior labral tears in developmental dysplasia of the hip: A multimodality imaging analysis*Yuki Ogawa, et al.*, Dept. of Orthop. Surg., Faculty of Medicine and Graduate School of Medicine, Hokkaido Univ.···S1242
- 4-DP-52 Relationship between subchondral bone CT values, articular cartilage degeneration, and pain across stages of hip osteoarthritis*Yosuke Kozuma, et al.*, Dept. of Orthop. Surg., Graduate School of Biomedical and Health Sciences, Hiroshima Univ.···S1242
- 4-DP-53 Stress evaluation of extra-articular tissues in acetabular dysplasia using CT images*Naoto Nakayama, et al.*, Dept. of Orthop. Surg., Graduate School of Biomedical and Health Sciences, Hiroshima Univ.···S1243
- 4-DP-54 Radiographic comparison of bony morphology in symptomatic borderline developmental dysplasia of the hip*Shotaro Tachibana, et al.*, Matsubara Mayflower Hosp.···S1243
- 4-DP-55 Evaluating labrum-cartilage complex damage in acetabular dysplasia: A comparative study of MRI and arthroscopic findings*Kohei Shimoyama*, Dept. of Orthop. Surg., Sapporo Medical Univ.···S1244

4th Day May 24 e-Poster Booth 3

8 : 25 ~ 9 : 00 e-Poster presentation 93 Infection: Epidemiology

Moderator K. Kohata

- 4-DP-56 Surgical field contamination analysis in various artificial joint arthroplasties*Akihito Oya, et al.*, Dept. of Orthop. Surg., Keio Univ.···S1245
- 4-DP-57 Relationship between surgical site infection in spine surgery and prior hospitalization*Tomoki Nakajima, et al.*, Dept. of Orthop. Surg., Gunma Univ. Graduate School of Medicine···S1245
- 4-DP-58 Risk factors for surgical site infection following spinal instrumentation surgery*Yohei Takahashi, et al.*, Spine Center, Japanese Red Cross Shizuoka Hosp.···S1246
- 4-DP-59 Factors associated with poor functional outcome in adult patients with acute septic arthritis of the hip*Genta Takemoto, et al.*, Dept. of Orthop. Surg., Toyohashi Municipal Hosp.···S1246
- 4-DP-60 Comparative study of clinical data between necrotizing soft tissue infections and cellulitis at emergency department: A retrospective cohort study*Yutaro Kuwahara, et al.*, Dept. of Orthop. Surg., Toyohashi Municipal Hosp.···S1247
- 4-DP-61 A clinical study of surgically treated septic arthritis of the sternoclavicular joint*Jun Nagai*, Dept. of Orthop. Surg., Yamagata Univ.···S1247
- 4-DP-62 Validation of a scoring tool (spinal instability pyogenic spondylitis score) developed to assess instability in pyogenic spondylitis*Sosuke Saito, et al.*, Dept. of Orthop. Surg., Nihon Univ. Itabashi Hosp.···S1248

Infection: Treatment and prevention

- 4-DP-63 Three cases of continuous local antibiotic perfusion for postoperative infections in spine surgery and a literature review *Shun Nokariya, et al.*, Dept. of Orthop. Surg., Kitasato Univ. ...S1249
- 4-DP-64 Systemic exposure to gentamicin during continuous local antibiotic perfusion (CLAP): A risk factor analysis *Yusuke Yamamoto, et al.*, Dept. of Orthop./Rheumatology, Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine, Graduate School of Medicine, Nagoya Univ. ...S1249
- 4-DP-65 A prospective study on the safety of prophylactic intrawound vancomycin administration in pediatric and young patients undergoing scoliosis surgery *Kazutaka Yamashita, et al.*, Dept. of Orthop. Surg., Okayama Univ. Hosp. ...S1250
- 4-DP-66 Optimization of diluted povidone-iodine irrigation for preventing periprosthetic joint infection (PJI) *Musashi Ima, et al.*, Dept. of Orthop. Surg., Graduate School of Medical Sciences, Kanazawa Univ. ...S1250
- 4-DP-67 Influence of perioperative oral health status on the incidence of surgical site infection following spinal surgery *Ryosuke Hirota, et al.*, Dept. of Orthop. Surg., Sapporo Medical Univ. ...S1251
- 4-DP-68 Infection prevention measures in spinal instrumentation surgery: Data from nationwide registry *Kazumasa Konishi, et al.*, Dept. of Orthop. Surg., Kyorin Univ. ...S1251
- 4-DP-69 Treatment outcomes of continuous local antibiotics perfusion for fracture related infection at our institute: Is implant preservation possible? *Go Sakai, et al.*, Dept. of Orthop. Surg., Komaki City Hosp. ...S1252

- 4-DP-70 Limb-salvage surgery after unplanned surgery for extremity bone sarcomas: 30-year experience at a tertiary referral center *Liuzhe Zhang, et al.*, Dept. of Orthop. Surg., The Univ. of Tokyo Hosp., The Univ. of Tokyo ...S1253
- 4-DP-71 Intraoperative robotic C-arm cone-beam CT imaging system enhances safety and accuracy in gross total resection of a cervical spine chondrosarcoma *Keiichi Ichikawa, et al.*, Dept. of Orthop. Surg., Gunma Univ. Graduate School of Medicine ...S1253
- 4-DP-72 Evaluation of surgical indications for tumor endoprosthetic replacement using compress-type implants *Naomasu Fukase, et al.*, Dept. of Orthop. Surg., Kobe Univ. Graduate School of Medicine ...S1254
- 4-DP-73 Joint-preserving surgery by intercalary resection and reconstruction with allograft using three-dimensional-printing cutting guide *Eiji Nakada, et al.*, Dept. of Orthop. Surg., Science of Functional Recovery and Reconstruction, Faculty of Medicine, Dentistry, and Pharmaceutical Sciences, Okayama Univ. ...S1254
- 4-DP-74 Clinical outcomes of tumor endoprosthetic reconstruction with polypropylene mesh for primary malignant bone and soft tissue tumors: 28-year experience *Teruhiko Ando, et al.*, Dept. of Orthop. Surg., Science of Functional Recovery and Reconstruction, Faculty of Medicine, Dentistry, and Pharmaceutical Sciences, Okayama Univ. ...S1255
- 4-DP-75 The prognosis and treatment of pathological fractures of proximal femur in patients with sarcoma *Koichi Okajima, et al.*, Dept. of Orthop. Surg., The Univ. of Tokyo Hosp., The Univ. of Tokyo ...S1255
- 4-DP-76 Discrepancy between anatomical and functional leg length after pelvic tumor resection *Kenji Sato, et al.*, Dept. of Orthop. Surg., Teikyo Univ. Hosp. ...S1256

10 : 55 ~ 11 : 25 e-Poster presentation 96 Tumor: Soft tissue sarcoma 1 Moderator Y. Tome

- 4-DP-77 Background of disadvantages in initial treatment with unplanned resection (simple resection) of soft tissue sarcoma
 *Yoji Shido, et al.*, Dept. of Orthop. Surg., Hamamatsu Univ. School of Medicine...S1257
- 4-DP-78 Association between timing of treatment and oncological prognosis after unplanned resection of soft tissue sarcoma
 *Shusa Ohshika, et al.*, Dept. of Orthop. Surg., Hirosaki Univ. Graduate School of Medicine...S1257
- 4-DP-79 Distant metastasis of superficial high grade non-round cell soft tissue sarcoma
 *Tomoaki Torigoe, et al.*, Dept. of Orthop. Oncology and Surg., Saitama International Medical Center, Saitama Medical Univ...S1258
- 4-DP-80 Vascular reconstruction in extensive groin sarcoma resection: Clinical results from six cases
 *Tomoaki Mori, et al.*, Dept. of Orthop. Surg., Keio Univ...S1258
- 4-DP-81 Complications of wide resection for bone and soft tissue sarcoma of the thigh
 *Keiichi Akahori, et al.*, Dept. of Orthop. Surg., Tottori Univ...S1259
- 4-DP-82 Treatment outcomes of chemotherapy for advanced soft tissue sarcoma at our institution
 *Kensaku Yamaga, et al.*, Dept. of Orthop. Surg., Tottori Univ...S1259

4th Day May 24 e-Poster Booth 4

8 : 25 ~ 9 : 05 e-Poster presentation 97 Tumor: Soft tissue sarcoma 2 Moderator H. Otani

- 4-DP-83 Spatial transcriptomic analysis of monophasic and biphasic synovial sarcoma
 *Satoshi Kamio, et al.*, Div. of Cellular Signaling, National Cancer Center Research Institute...S1260
- 4-DP-84 Treatment outcomes and the efficacy of adjuvant radiation therapy in elderly-onset soft tissue sarcoma *Junji Wasa, et al.*, Div. of Orthop. Oncology, Shizuoka Cancer Center...S1260
- 4-DP-85 Clinical features of excessive elderly patients with soft tissue sarcoma over 85 or 90 years old
 *Hiroyuki Tsuchie, et al.*, Dept. of Orthop. Surg., Akita Univ. Graduate School of Medicine...S1261
- 4-DP-86 Clinical features and prognostic impact of extrapulmonary metastasis in dedifferentiated liposarcoma
 *Tomohisa Sakai, et al.*, Rare Cancer Center, Nagoya Univ. Hosp...S1261
- 4-DP-87 Impact of preoperative histological diagnosis on local recurrence in patients with well-differentiated liposarcoma/atypical lipomatous tumors
 *Shinji Miwa, et al.*, Dept. of Orthop. Surg., Graduate School of Medical Sciences, Kanazawa Univ...S1262
- 4-DP-88 Treatment outcomes and prognostic factors in undifferentiated pleomorphic sarcoma and myxofibrosarcoma *Yoshinori Imura, et al.*, Dept. of Orthop. Surg., Graduate School of Medicine, The Univ. of Osaka...S1262
- 4-DP-89 Epidemiological survey of clear cell sarcoma: Data from the Soft Tissue Tumor Registry of Japan *Akihito Nagano, et al.*, Dept. of Orthop. Surg., Div. of Disease Control, Research field of Medical Sciences, Graduate School of Medicine, Gifu Univ...S1263
- 4-DP-90 Usefulness of inflammatory markers for predicting early metastasis in soft tissue sarcoma
 *Tomotaka Yoshida, et al.*, Musculoskeletal Science, Yokohama City Univ. Graduate School of Medicine...S1263

9 : 15 ~ 9 : 50 e-Poster presentation 98 Tumor: Miscellaneous Moderator M. Kito

- 4-DP-91 Neoadjuvant single-dose denosumab for surgical curettage to giant cell tumor of bone
 *Hiroaki Kimura, et al.*, Dept. of Orthop. Surg., Nagoya City Univ., Graduate School of Medical Sciences...S1264

- 4-DP-92 Clinical outcome of giant cell tumor of bone with primary pathological fracture
 *Takuya Watanabe, et al.*, Dept. of Orthop. Oncology and Surg.,
 Saitama International Medical Center, Saitama Medical Univ.···S1264
- 4-DP-93 Clinical outcomes of pediatric simple bone cysts followed until physeal closure at our institution
 *Yumi Matsuyama, et al.*, Dept. of Musculoskeletal Surg.,
 Dept. of Multimodality Therapy for Cancer, Mie Univ. Graduate School of Medicine···S1265
- 4-DP-94 Three cases of extensive palmar digital ganglion successfully treated by resection of the
 synovial tendon sheath
 ···· *Manami Nakanishi, et al.*, Dept. of Orthop. Surg., Akita Univ. Graduate School of Medicine···S1265
- 4-DP-95 Sports restriction and return in patients with simple bone cysts: Clinical features and
 related factors *Hiroshi Koike, et al.*, Dept. of Orthop. Surg., Nagoya Univ. Hosp.···S1266
- 4-DP-96 Is core needle biopsy recommended for neurogenic tumors?
 *Toshihiko Nishisho, et al.*, Dept. of Orthop.,
 Institute of Biomedical Sciences, Tokushima Univ. Graduate School···S1266
- 4-DP-97 Phosphaturic mesenchymal tumor: A report of five cases
 *Takuto Itano, et al.*, Dept. of Musculoskeletal Oncology and Rehabilitation.,
 National Cancer Center Hosp.···S1267

10 : 05 ~ 10 : 40 e-Poster presentation 99 Metastatic disease, miscellaneous Moderator S. Sato

- 4-DP-98 Impact of specialized outpatient clinic on bone metastasis on patients with spinal metastases and
 spine surgeons
 *Hiroyuki Tsuchie, et al.*, Dept. of Orthop. Surg., Akita Univ. Graduate School of Medicine···S1268
- 4-DP-99 Impact of an imaging-based bone metastasis cancer board on early surgical management of
 spinal metastases *Yu Toda, et al.*, Dept. of Orthop. Surg., Saga Univ.···S1268
- 4-DP-100 What constitutes sustainable bone metastasis care in community hospitals?: Practical
 approaches and challenges in bone metastasis care at our hospital
 *Takashi Yamada, et al.*, Dept. of Orthop. Surg., NTT Medical Center Tokyo···S1269
- 4-DP-101 Treatment practices and outcomes by age group for high-grade osteosarcoma
 *Takahiko Ishimaru, et al.*, Dept. of Orthop. Surg., Okayama Univ. Hosp.···S1269
- 4-DP-102 Clinical features of secondary osteosarcoma after treatment of childhood cancers
 *Manabu Hoshi, et al.*, Dept. of Orthop. Surg., Osaka City General Hosp.···S1270
- 4-DP-103 Current status of comprehensive genomic profiling tests for musculoskeletal sarcoma:
 An institutional study
 *Michiyuki Hakozaki, et al.*, Dept. of East Shirakawa Orthop. Academy,
 Fukushima Medical Univ.···S1270
- 4-DP-104 Differences in the long-term natural history of non-ossifying fibromas between bilateral and
 unilateral cases
 *Kumiko Yotsuya, et al.*, Dept. of Orthop. Surg., Hamamatsu Univ. School of Medicine···S1271

10 : 55 ~ 11 : 30 e-Poster presentation 100 Metastatic disease Moderator T. Shirai

- 4-DP-105 Nationwide survey of surgical treatment for bone metastases in Rosai hospitals:
 A multi-institutional study in orthopaedic surgery
 *Tomoya Matsunobu, et al.*, Dept. of Orthop. Surg., Kyushu Rosai Hosp.···S1272
- 4-DP-106 Clinical value of cement gun-assisted intramedullary nailing in the treatment of femoral
 bone metastases *Sei Morinaga, et al.*, Dept. of Orthop. Surg.,
 Graduate School of Medical Sciences, Kanazawa Univ.···S1272
- 4-DP-107 Prognosis of bone metastasis from lung cancer according to pathological diagnosis and the
 role of orthopaedic surgeons
 *Shinichiro Ito, et al.*, Dept. of Orthop. Surg., Kasukabe Medical Center···S1273

- 4-DP-108 Prognostic value of the serum albumin-to-globulin ratio (AGR) in patients with femoral metastasis from cancer
 *Yoshikuni Mimata, et al.*, Dept. of Orthop. Surg., Iwate Medical Univ.···S1273
- 4-DP-109 Results of prognosis and clinical evaluation based on preoperative nutritional status in cases of palliative surgery for metastatic spinal tumors
 *Hirofumi Shimada, et al.*, Dept. of Orthop. Surg., Kagoshima City Hosp.···S1274
- 4-DP-110 Clinical characteristics and increasing incidence of bone and soft tissue malignant lymphomas diagnosed via orthopaedic consultation *Sei Morinaga, et al.*, Dept. of Orthop. Surg., Graduate School of Medical Sciences, Kanazawa Univ.···S1274
- 4-DP-111 Investigating the effects of high-dose denosumab treatment on vertebral bodies without metastases *Hirokatsu Sawada, et al.*, Dept. of Orthop. Surg., Nihon Univ.···S1275

4th Day May 24 e-Poster Booth 5

9 : 15 ~ 9 : 50 e-Poster presentation 101 Spine: Trauma Moderator K. Nagata

- 4-DP-112 A study of surgical outcomes and methods for axis fractures
 *Yuya Kajiki, et al.*, Dept. of Orthop. Surg., Japanese Red Cross Kobe Hosp.···S1276
- 4-DP-113 Early surgical stabilization reduces perioperative complications in older adults with thoracolumbar fractures from high-energy trauma: A propensity score-matched analysis
 *Tomoaki Shimizu, et al.*, Dept. of Orthop. Surg., Tsukuba Medical Center Hosp.···S1276
- 4-DP-114 Are prevalent vertebral fractures a risk factor for poor clinical outcomes after lumbar instrumented fusion surgery? *Hayato Oishi, et al.*, Dept. of Orthop. Surg., Miyoshi Hosp.···S1277
- 4-DP-115 Is removal of mandatory following percutaneous pedicle screw fixation for thoracolumbar fractures
 *Yukihide Shimamura, et al.*, Dept. of Orthop. Surg., Miyukikai Hosp.···S1277
- 4-DP-116 Predictive factors for loss of correction after implant removal in thoracolumbar burst fractures
 *Takuya Morita, et al.*, Dept. of Orthop. Surg., Japanese Red Cross Kobe Hosp.···S1278
- 4-DP-117 Increased perioperative complications in AIS A-B patients with thoracolumbar burst and fracture-dislocation injuries
 *Kazuki Hayakawa, et al.*, Dept. of Orthop. Surg., Japanese Red Cross Kobe Hosp.···S1278
- 4-DP-118 Association of Liver-to-Spleen ratio at injury with neurological recovery in spinal cord injury: A case-control study
 *Kosuke Nitta, et al.*, Dept. of Orthop. Surg., Hirosaki Univ. Graduate School of Medicine···S1279

10 : 05 ~ 10 : 40 e-Poster presentation 102 Spinal alignment Moderator S. Inami

- 4-DP-119 Ten-year longitudinal changes in spinal alignment in older adults undergoing community health checkups
 *Shin Oe, et al.*, Dept. of Orthop. Surg., Hamamatsu Univ. School of Medicine···S1280
- 4-DP-120 The relationship between the number of remaining teeth and spino-pelvic alignment
 *Hiroka Aoyama, et al.*, Dept. of Orthop. Surg., Otaru General Hosp.···S1280
- 4-DP-121 Targeted realignment for severe adult spinal deformity: Mid-term outcomes in a single-center cohort (Mean SVA 120 mm, PI-LL Mismatch 30°)
 *Shimei Tanida, et al.*, Dept. of Orthop. Surg., Shiga General Hosp.···S1281
- 4-DP-122 Impact of sagittal spinal alignment on quality of life in patients with severe knee osteoarthritis undergoing total knee arthroplasty
 *Motonori Kohno, et al.*, Dept. of Orthop. Surg., Chigasaki Municipal Hosp.···S1281
- 4-DP-123 The relationship between occiput-wall distance and global alignment of spine
 *Yuji Endo, et al.*, Dept. of Orthop. Surg., Fukushima Medical Univ.···S1282

- 4-DP-124 A novel evaluation method for lower limb compensation in adult spinal deformity:
Spinopelvic-hip harmony
.....*Izumi Tamura, et al.*, Dept. of Orthop. Surg., Tohoku Univ. Graduate School of Medicine...S1282
- 4-DP-125 Spinopelvic-hip harmony better reflects HRQOL: Comparison with PI-LL
.....*Ryo Fujita, et al.*, Dept. of Orthop. Surg., Sendai Nishitaga Hosp...S1283

10 : 55 ~ 11 : 30	e-Poster presentation 103 Spinal instrumentation	Moderator A. Hiyama
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- 4-DP-126 Utility of unilateral screw-in cage fixation in anterior-posterior cervical kyphosis surgery:
Correction and foramen expansion
.....*Ryo Yamamura, et al.*, Dept. of Orthop. Surg., Showa Medical Univ...S1284
- 4-DP-127 Subsidence in anterior cervical discectomy and fusion with zero-profile stand-alone cages:
Risk factors and clinical relevance
.....*Keiji Nagata, et al.*, Dept. of Orthop. Surg., Wakayama Medical Univ...S1284
- 4-DP-128 Efficacy of a novel morphology-oriented interbody spacer (UNIOS): A comparative study with
titanium-coated PEEK cages
.....*Fumito Tanabe, et al.*, Dept. of Orthop. Surg., Kirishima Orthop. Hosp...S1285
- 4-DP-129 Radiographic adjacent segment lesions over 3 years after PLIF using high-angle cages
.....*Daisuke Inoue, et al.*, Dept. of Orthop. Surg., Kashiba Asahigaoka Hosp...S1285
- 4-DP-130 Association between pedicle screw parameters and bone fusion in transforaminal lumbar
interbody fusion (TLIF)
.....*Shuhei Mizobuchi, et al.*, Dept. of Orthop. Surg., Kochi Medical School, Kochi Univ...S1286
- 4-DP-131 Comparative study of S1 pedicle screws inserted by PSEPS and CBT techniques in L5/S
interbody fusion surgery
.....*Masaru Hatano, et al.*, Dept. of Orthop. Surg., Hyogo Medical Univ...S1286
- 4-DP-132 Minimally invasive benefits and radiation exposure reduction achieved by the cortical bone
trajectory screw technique using patient-specific template guide system
.....*Akira Fukushima, et al.*, Dept. of Orthop. Surg., Hokkaido Orthop. Memorial Hosp...S1287

4th Day May 24 e-Poster Booth 6
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9 : 15 ~ 9 : 50	e-Poster presentation 104 Spine: Outcome	Moderator M. Sekiguchi
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- 4-DP-133 Patient-reported outcome measures (PROMS) after lumbar spine surgery in cancer patients
are not inferior to those in non-cancer patients
.....*Juri Teramoto, et al.*, Dept. of Orthop., Juntendo Univ...S1288
- 4-DP-134 Impact of L4 spondylolisthesis on spinopelvic alignment and health-related quality of life
.....*Yusuke Murakami, et al.*, Dept. of Orthop. Surg., Hamamatsu Univ. School of Medicine...S1288
- 4-DP-135 Change of spinal alignment and patient satisfaction after short fusions for degenerative
lumbar scoliosis
.....*Shogo Fukase, et al.*, Dept. of Orthop. Surg., Hakodate Central General Hosp...S1289
- 4-DP-136 Association between early MRI findings and patient-reported outcomes after full-endoscopic
lumbar discectomy*Shutaro Fujimoto, et al.*, Dept. of Orthop. Surg., Sapporo Medical Univ...S1289
- 4-DP-137 Outcome measurements in thoracic myelopathy
.....*So Kato, et al.*, Dept. of Orthop. Surg., The Univ. of Tokyo Hosp., The Univ. of Tokyo...S1290
- 4-DP-138 Minimally clinical important difference (MCID) of JOABPEQ on surgical treatment for elderly
people with lumbar degenerative disease*Minori Kato, et al.*, Dept. of Orthop. Surg.,
Osaka Metropolitan Univ. Graduate School of Medicine...S1290

- 4-DP-139 Achieving the minimum clinically important difference in JOA score after surgery for DCM: Predictive factors and impact on PROMs
 *Toshiki Okubo, et al.*, Dept. of Orthop. Surg., Keio Univ.··S1291

10 : 05 ~ 10 : 40	e-Poster presentation 105 Spinal deformity	Moderator S. Kato
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- 4-DP-140 Lateral interbody release technique improves the bone union at L5/S1 in posterior lumbar interbody fusion for adult spinal deformity surgery
 *Takahiro Kozaki, et al.*, Dept. of Orthop. Surg., Wakayama Medical Univ.··S1292
- 4-DP-141 Mid- to long-term outcomes of implant-related complications after adult spinal deformity surgery *Yujiro Kagami, et al.*, Dept. of Orthop./Rheumatology, Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine, Graduate School of Medicine, Nagoya Univ.··S1292
- 4-DP-142 Ten-year outcomes of thoracopelvic corrective fusion for degenerative scoliosis
 *Yu Yamato, et al.*, Dept. of Orthop. Surg., Hamamatsu Univ. School of Medicine··S1293
- 4-DP-143 The sagittal touched vertebra classification determined the trends of adult spinal deformity surgeries *Yuki Mihara, et al.*, Dept. of Orthop. Surg., Iwata City Hosp.··S1293
- 4-DP-144 The outcomes of short fusion surgery in patients with degenerative kyphoscoliosis
 *Tomohiro Yamada, et al.*, Dept. of Orthop. Surg., Hamamatsu Univ. School of Medicine··S1294
- 4-DP-145 Surgical outcomes of 51 cases of dropped head syndrome
 *Yoshifumi Kudo, et al.*, Dept. of Orthop. Surg., Showa Medical Univ.··S1294
- 4-DP-146 Potential effects of serotonin-noradrenaline reuptake inhibitors: Characteristics of the patients with improvement in dropped head symptoms
 *Haruki Funao, et al.*, Dept. of Orthop. Surg., International Univ. of Health and Welfare··S1295

10 : 55 ~ 11 : 30	e-Poster presentation 106 Pediatric orthopaedics 2	Moderator Y. Fujimoto
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- 4-DP-147 Scapular osteochondroma: Anatomical distribution and developmental pathogenetic considerations in a retrospective case series of eight patients
 *Manabu Hoshi, et al.*, Dept. of Orthop. Surg., Osaka City General Hosp.··S1296
- 4-DP-148 The cross-sectional area of the gluteus medius muscle decreases following open reduction via an extensive anterolateral approach for DDH
 *Tetsuya Yamamoto, et al.*, Dept. of Orthop. Surg., Science of Functional Recovery and Reconstruction, Faculty of Medicine, Dentistry, and Pharmaceutical Sciences, Okayama Univ.··S1296
- 4-DP-149 Natural history of accessory navicular in children: A longitudinal study with 2-year follow-up: KID loco study
 *Takahide Sasaki, et al.*, Dept. of Orthop. Surg., Wakayama Medical Univ. Kihoku Hosp.··S1297
- 4-DP-150 The influence of adolescent idiopathic scoliosis on the development of hip joint: Two-year longitudinal evaluation of the hip center-edge angle
 *Takayuki Matsumoto, et al.*, Div. of Orthop. Surg., Dept. of Medicine of Sensory and Motor Organs, Faculty of Medicine, Univ. of Miyazaki··S1297
- 4-DP-151 Quality of life changes after hip reconstructive surgery in children with cerebral palsy: CPCHILD assessment *Misa Kaga, et al.*, Dept. of Orthop. Surg., Sapporo Medical Univ.··S1298
- 4-DP-152 Longitudinal clinical study of neuromuscular scoliosis and hip dislocation in children with severe cerebral palsy *Yoh Fujimoto, et al.*, Dept. of Orthop., Shizuoka Children's Hosp.··S1298
- 4-DP-153 Report on developmental dysplasia of the hip (DDH) found after one year of age in the Saitama Children's Medical Center
 *Noboru Oikawa, et al.*, Dept. of Orthop. Surg., Saitama Children's Medical Center··S1299