

The 97th Annual Meeting of the Japanese Orthopaedic Association (II)

May 23-26, 2024 Fukuoka
Congress President: Morio Matsumoto, M.D.
Department of Orthopaedic Surgery,
Keio University School of Medicine

3rd Day May 25 Room 1

8 : 00 ~ 9 : 00	100-year lifespan lecture 2	Moderator K. Takeshita
3-1-100YL2	Social security system in aging society	<i>Shigekazu Komoto</i> , MHLW...S644
9 : 15 ~ 10 : 15	Special lecture 3	Moderator Y. Toyama
3-1-SL3	The impact of digital technology on health	<i>Jun Murai</i> , Keio Univ...S644
10 : 30 ~ 11 : 30	Keynote lecture	Moderator Y. Nakashima
3-1-KL	Towards a life-long active society: The role of orthopaedic surgery	<i>Atsushi Seike</i> , Japanese Red Cross Society...S645
12 : 00 ~ 13 : 10	Luncheon seminar 24	Moderator Y. Inaba
3-1-LS24-1	Periarticular joint infection and the history of antimicrobial implant development	<i>Hiroyuki Tsuchiya</i> , Dept. of Orthop. Surg., Yokohama Sakae Kyosai Hosp...S646
3-1-LS24-2	Prevention of surgical site infections: Guidelines and iodine-coated implants	<i>Toshiharu Shirai</i> , Dept. of Orthop., Graduate School of Medical Science, Kyoto Prefectural Univ. of Medicine...S646
13 : 25 ~ 14 : 25	Memorial lecture	Moderator K. Yamamoto
3-1-ML	Developing an inclusive society through sports - The Olympic & Paralympic Games: Achievements & issues: Tokyo's legacy goes on to Paris	<i>Seiko Hashimoto</i> , Member of the House of Councillors, National Diet of Japan...S647
14 : 40 ~ 15 : 40	Create the future lecture 2	Moderator K. Takahashi
3-1-CFL2	SCOT, a near-future operating room that realizes future medicine	<i>Yoshihiro Muragaki, et al.</i> , Center for Advanced Medical Engineering Research and Development (CAMED), Kobe Univ...S647
15 : 55 ~ 17 : 15	Symposium 50 The future direction of scientific meetings	Moderators Y. Matsuyama, R. Kuroda
3-1-S50-1	Hosting JOSKAS-JOSSM 2022	<i>Norimasa Iwasaki</i> , Dept. of Orthop. Surg., Faculty of Medicine and Graduate School of Medicine, Hokkaido Univ...S648
3-1-S50-2	Reorganization and integration of societies in the field of orthopaedic sports and knee surgery	<i>Nobuo Adachi, et al.</i> , Dept. of Orthop. Surg., Graduate School of Biomedical and Health Sciences, Hiroshima Univ...S648
3-1-S50-3	Report from Spine Week 2023	<i>Manabu Ito</i> , Dept. of Orthop. Surg., NHO Hokkaido Medical Center...S649

- 3-1-S50-4 The future of academic societies: Ahead of SWJ2025
 *Yukihiro Matsuyama, et al.*, Dept. of Orthop. Surg., Hamamatsu Univ. School of Medicine...S649
- 3-1-S50-5 Challenges and initiatives for promoting diversity in orthopaedic surgery
 *Kazuyo Yamauchi*, Dept. of Community-Oriented Medical Education,
 Graduate School of Medicine, Chiba Univ...S650
- 3-1-S50-6 Considering the joint holding of scientific meetings from a corporate standpoint
 *Takafumi Konishi*, Nippon Zoki Pharmaceutical...S650

17 : 30 ~ 18 : 30 Create the future lecture 3 Moderator S. Ohtori

- 3-1-CFL3-1 Japan government support projects for developing diagnostic/therapeutic solutions using
 medical DX *Hiroya Hirose*, NEDO...S651
- 3-1-CFL3-2 Meeting the challenge for a new medical practice using medical DX
 *Yoshinori Katsumata*, Institute for Integrated Sports Medicine, Keio Univ...S651

3rd Day May 25 Room 2

8 : 00 ~ 9 : 00 JOA Directors' Proposed Lecture 1 Moderator H. Akiyama

- 3-2-JEL1-1 The current state and future of robotic-assisted total knee arthroplasty
 *Yasuo Niki, et al.*, Fujita Medical Innovation Center, Fujita Univ, Tokyo...S652
- 3-2-JEL1-2 Robot-assisted spine surgery in a hybrid operating room
 *Jun Takahashi*, Dept. of Orthop. Surg., Shinshu Univ...S652

9 : 15 ~ 10 : 15 JOA Directors' Proposed Lecture 2 Moderator S. Nakajima

- 3-2-JEL2 Basics of antimicrobial therapy for orthopaedic related infections
 *Koji Yamada, et al.*, Nakanoshima Orthop...S653

**10 : 25 ~ 11 : 45 JOA Directors' Proposed Symposium 1 Moderators K. Ebata, M. Akishita
 Inter-disciplinary strategies for locomotive syndrome and frailty**

- 3-2-JS1-1 Backgrounds and activities of the frailty and locomotive syndrome counterplans council
 *Masahiro Akishita*, Tokyo Metropolitan Institute for Geriatrics and Gerontology...S654
- 3-2-JS1-2 Locomotive syndrome awareness project with a view to countering frailty
 *Takashi Ohe*, NTT Medical Center Tokyo...S654
- 3-2-JS1-3 Measures against locomotive syndrome and frailty in SLOC
 *Shohiro Hayashi*, Hayashi Orthop. Clinic...S655
- 3-2-JS1-4 Important role of rehabilitation for prevention of frail and locomotive syndrome
 *Naoshi Ogata*, Dept. of Rehabilitation Medicine, Teikyo Univ...S655
- 3-2-JS1-5 Importance of fragility fracture prevention in the prevention of locomotion: Considerations of
 national survey in hip fracture
 *Satoshi Ikeda, et al.*, Dept. of Orthop. Surg., Ken-Ai Memorial Hosp...S656
- 3-2-JS1-6 The initiatives of MHLW for extension of healthy life expectancy through the prevention of
 locomotive syndrome *Takuya Oda*, Ministry of Health, Labour and Welfare...S656

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

- 3-2-LS25 How implant concept performs between different philosophy, MA and KA
 *Kazuhiko Michishita*, Dept. of Orthop. Surg., JCHO Yugawara Hosp.
Takashi Nakamura, Toho Univ. Omori Medical Center...S657

14 : 40 ~ 15 : 40 Afternoon seminar 2

Moderator K. Hayashida

- 3-2-AS2-1 Past, present & future of shoulder arthroplasty
.....*Naoki Suenaga, et al.*, Upper Extremity Center of Joint Replacement & Endoscopy,
Hokushin Orthop. Hosp. ...S658
- 3-2-AS2-2 Reverse shoulder arthroplasty: Easy surgical techniques for excellent postoperative outcomes
.....*Hiroshi Hashiguchi*, Dept. of Orthop. Surg., Reiwa Arakawa Hosp. ...S658

15 : 55 ~ 17 : 15 Symposium 51

Moderators Y. Shinto, Y. Tajiri

Possibilities for re-use of single-use surgical devices in orthopaedics

- 3-2-S51-1 Expectations for emerging remanufactured single-use medical devices
.....*Yoshio Uetsuka*, Matsumoto Global Foundation ...S659
- 3-2-S51-2 Reuse and remanufacturing of single-use medical devices
.....*Masaki Takashina*, Surgical Center/CSSD/Dept. of Clinical Engineering,
Osaka Univ. Hosp. ...S659
- 3-2-S51-3 Arthroscopic-related surgical instruments that should be reused
.....*Yasuyuki Ishibashi*, Dept. of Orthop. Surg., Hirosaki Univ. Graduate School of Medicine ...S660
- 3-2-S51-4 Spine-related surgical instruments that should be reused
.....*Sadayuki Ito, et al.*, Dept. of Orthop./Rheumatology, Musculoskeletal and Cutaneous Surg.,
Program in Integrated Medicine, Graduate School of Medicine, Nagoya Univ. ...S660
- 3-2-S51-5 Feasibility of reuse of single-use surgical devices in external fixation devices
.....*Nobuyuki Takenaka*, Dept. of Trauma, Fukushima Medical Univ. /
Trauma Center of Southern Tohoku Hosp. ...S661

17 : 30 ~ 18 : 30 Create the future lecture 4

Moderator T. Iwamoto

- 3-2-CFL4-1 The present and future of AI in musculoskeletal imaging from a radiologist's perspective
.....*Taiki Nozaki*, Dept. of Radiology, Keio Univ. ...S662
- 3-2-CFL4-2 Legal and ethical responsibility for the use of AI
.....*Yu Munakata*, Sekiya & Munakata Law Office ...S662

3rd Day May 25 Room 3

8 : 00 ~ 9 : 00 JOA Directors' Proposed Lecture 3

Moderator A. Matsumine

- 3-3-JEL3 Current status of medical lawsuits in orthopaedics
.....*Susumu Nakajima, et al.*, Dept. of Patient Safety, Toranomon Hosp. ...S663

9 : 15 ~ 10 : 15 JOA Directors' Proposed Lecture 4

Moderator S. Ohtori

- 3-3-JEL4-1 Neck pain due to cervical spine
.....*Masahiko Watanabe*, Dept. of Orthop. Surg., Surgical Science, Tokai Univ. ...S664
- 3-3-JEL4-2 Low back pain*Koichi Sairyō*, Dept. of Orthop., Institute of Biomedical Sciences,
Tokushima Univ. Graduate School ...S664

10 : 25 ~ 11 : 45 JOA Directors' Proposed Symposium 2

Moderators M. Nakamura, H. Akiyama

How AI could pioneer the future of orthopaedics

- 3-3-JS2-1 Artificial intelligence and spinal disorders: From differential diagnosis to prognostic modeling
.....*Satoshi Maki, et al.*, Dept. of Orthop. Surg., Graduate School of Medicine, Chiba Univ. ...S665
- 3-3-JS2-2 Diagnostic imaging support system for osteoporotic vertebral fractures using
artificial intelligence*Akito Yabu, et al.*, Dept. of Orthop. Surg., Osaka Metropolitan Univ. ...S665

- 3-3-JS2-3 The innovation of osteoporosis treatment: Development and social impact of AI medical devices for bone analysis from chest radiographs
*Yoichi Sato, et al.*, Nagoya Univ. Graduate School of Medicine...S666
- 3-3-JS2-4 Artificial intelligence-based image analysis of the hip using X-rays and CT images
*Keisuke Uemura, et al.*, Dept. of Orthop. Medical Engineering,
 Graduate School of Medicine, Osaka Univ...S666
- 3-3-JS2-5 The evolution of medical AI research: From image AI to language AI
*Ryuichi Nakahara*, Dept. of Orthop. Surg.,
 Science of Functional Recovery and Reconstruction, Faculty of Medicine,
 Dentistry, and Pharmaceutical Sciences, Okayama Univ...S667

12 : 00 ~ 13 : 10 Luncheon seminar 26 Moderator N. Miyakoshi

- 3-3-LS26 Rethinking the effectiveness and safety of long-term treatment based on a correct understanding of bone density and bone quality
*Mitsuru Saito*, Dept. of Orthop. Surg., The Jikei Univ. School of Medicine...S668

13 : 25 ~ 14 : 25 JOA/AAOS combined program instructional course lectures 1 Moderators Y. Nakashima, S. Demura

- 3-3-ICL1-1 Fixation of periprosthetic distal femur fractures
*Paul Tornetta, III*, Boston Univ., Boston, MA, USA...S669
- 3-3-ICL1-2 Surgical considerations in the elderly patient with spinal deformity
*Steven D. Glassman*, Orthop. Surg.,
 Univ. of Louisville School of Medicine, Louisville, KY, USA...S669

14 : 40 ~ 15 : 40 JOA/AAOS combined program instructional course lectures 2 Moderators M. Watanabe, H. Murakami

- 3-3-ICL2-1 The future direction of decision making in spinal metastasis
*Joseph H. Schwab*, Dept. of Orthop. Surg, Cedars Sinai Hosp., Los Angeles, CA, USA...S670
- 3-3-ICL2-2 Surgery for cervical spondylotic myelopathy (CSM): Considerations for spinal alignment
*John G. Heller*, Dept. of Orthop. Surg.,
 The Emory Orthop. & Spine Center, Atlanta, GA, USA...S670

15 : 55 ~ 17 : 25 JOA/AAOS combined symposium Moderators E.O. Klineberg, K. Watanabe

- 3-3-CS-1 Cervical myelopathy in elderly patients: Indications for treatment and surgical selection
*John G. Heller*, Dept. of Orthop Surg.,
 The Emory Orthop. & Spine Center, Atlanta, GA, USA...S671
- 3-3-CS-2 Optimal treatment strategy for acute traumatic cervical spinal cord injury in older adults
*Hiroataka Chikuda*, Dept. of Orthop. Surg., Gunma Univ. Graduate School of Medicine...S671
- 3-3-CS-3 Current treatment recommendations for elderly patients with symptomatic lumbar degenerative disease
*Steven D. Glassman*, Orthop. Surg.,
 Univ. of Louisville School of Medicine, Louisville, KY, USA...S672
- 3-3-CS-4 The current recommendations and indications for the surgical treatment of lumbar degenerative diseases in elderly patients
*Mitsuru Yagi*, Dept. of Orthop. Surg., International Univ. of Health and Welfare...S672
- 3-3-CS-5 The management of spine metastasis in the elderly
*Joseph H. Schwab*, Dept. of Orthop. Surg, Cedars Sinai Hosp., Los Angeles, CA, USA...S673
- 3-3-CS-6 Treatment of spinal fracture in elderly patient
*Daisuke Togawa*, Dept. of Orthop. Surg., Kindai Univ. Nara Hosp...S673

17 : 30 ~ 18 : 30 KOA special lecture

Moderator R. Kuroda

- 3-3-KSL-1 Selection of high tibial osteotomy
.....*Myung Chul Lee*, Dept. of Orthop. Surg., SNU Seoul Hosp., Seoul, Korea...S674
- 3-3-KSL-2 Advantage of PAP surgery in cervical spine
.....*Kyung Soo Suk*, Dept. of Orthop. Surg., Gangnam Severance Hosp.,
Yonsei Univ. College of Medicine, Seoul, Korea...S674

3rd Day May 25 Room 4

8 : 00 ~ 9 : 00 Instructional lecture 44

Moderator K. Horiuchi

- 3-4-EL44 Elucidation of muscle maintenance mechanism by mesenchymal stromal cells
.....*Akiyoshi Uezumi*, Div. of Cell Hetero., Med. Inst. of Bioreg., Kyushu Univ...S675

9 : 15 ~ 10 : 15 Instructional lecture 45

Moderator H. Nagashima

- 3-4-EL45 Assessment of pain caused by spinal disorders
.....*Shinichi Konno*, Dept. of Orthop. Surg., Fukushima Medical Univ...S675

12 : 00 ~ 13 : 10 Luncheon seminar 27

Moderator K. Ikari

- 3-4-LS27 Treatment strategy for young female patients with rheumatoid arthritis aimed at suppressing
joint destruction*Ryota Hara*, Dept. of Orthop. Surg., Nara Medical Univ...S676

13 : 25 ~ 14 : 25 Free papers Pain

Moderators K. Yamada, Y. Oshima

- 3-4-1 A randomized, double-blind, non-inferiority trial comparing acetaminophen and NSAIDs in elderly
patients with osteoarthritis of the hip and knee (RETHINK)
.....*Makoto Endo, et al.*, Dept. of Orthop. Surg., Clinical Medicine,
Graduate School of Medical Sciences, Kyushu Univ...S677
- 3-4-2 Two-year prospective study on post-TKA pain and synovitis: Ultrasound power doppler analysis
.....*Natsuki Sugimura, et al.*, Dept. of Orthop. Surg., Kochi Medical School, Kochi Univ...S677
- 3-4-3 Neuropathic pain, pain catastrophizing and central sensitization before and after total hip
arthroplasty in patients with osteoarthritis of the hip
.....*Yohei Yamabe, et al.*, Dept. of Musculoskeletal Surg.,
Dept. of Multimodality Therapy for Cancer, Mie Univ. Graduate School of Medicine...S678
- 3-4-4 The role of pain self-efficacy on the relationship between severity and central sensitization in patients
with chronic low back pain*Kento Moriki, et al.*, Dept. of Reha., Shinoro Orthop...S678
- 3-4-5 Association between sensory organ disorders and musculoskeletal pain: 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...S679
- 3-4-6 Multi-site chronic pain is a risk factor for the development of dementia: LOHAS study
.....*Yuji Endo, et al.*, Dept. of Orthop. Surg., Fukushima Medical Univ...S679

14 : 40 ~ 16 : 00 JOA Directors' Proposed Symposium 3

Moderators H. Taneichi, S. Gomibuchi

Current status and future perspectives of JOANR in its 5th year of operation

- 3-4-JS3-1 Current status and future prospects of JOANR: Challenges in the 5th year of operation
.....*Tokumi Kanemura, et al.*, Dept. of Orthop. Surg., Konan Kosei Hosp...S680
- 3-4-JS3-2 Use of JOANR data for Japan health-care fee
.....*Yutaka Hiraizumi*, Dept. of Orthop. Surg., Showa Univ...S680

- 3-4-JS3-3 Endeavors to working group of the JOANR correspondence in social insurance committee
*Katsufumi Uchiyama, et al.*, Dept. of Patient Safety, Kitasato Univ.··S681
- 3-4-JS3-4 Problems and issues that emerge from data cleansing
*Tokiko Inagaki*, Public Noto General Hosp. Medical Information Management Office··S681
- 3-4-JS3-5 The characteristics of JOANR from a software engineer's perspective
*Hirota Suzuki*, Specialist Doctors Inc.··S682

16 : 15 ~ 17 : 15	Free papers ACL 2	Moderators M. Nozaki, S. Taketomi
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- 3-4-7 Quadriceps tendon is suitable for ACL reconstruction in child and adolescent patients:
 Age-related microstructural changes compared to semitendinosus tendon
*Junsuke Nakase, et al.*, Dept. of Orthop. Surg.,
 Graduate School of Medical Sciences, Kanazawa Univ.··S683
- 3-4-8 Simultaneous ACL/ALL reconstruction improves postoperative knee rotational instability in
 grade 3 pivot shift ACL injuries: Quantitative evaluation under anesthesia
*Shunta Hanaki, et al.*, Dept. of Orthop. Surg., Nagoya City Univ. Hosp.··S683
- 3-4-9 Difference of ligamentization according to graft type after anterior cruciate ligament
 reconstruction: Quantitative assessment using UTE-T2* mapping
*Yoshihiro Ishida, et al.*, Dept. of Orthop. Surg.,
 Graduate School of Medical Sciences, Kanazawa Univ.··S684
- 3-4-10 Comparison of chondral lesions between bone-patellar tendon-bone grafts and hamstring tendon
 grafts on second-look arthroscopy following anterior cruciate ligament reconstruction
*Yuji Yamamura, et al.*, Dept. of Orthop. Surg., Sapporo Medical Univ.··S684
- 3-4-11 Factors related to recovery of quadriceps muscle strength after anterior cruciate ligament
 reconstruction surgery in patients over 40 years
*Yoshiyuki Senga, et al.*, Dept. of Musculoskeletal Surg.,
 Dept. of Multimodality Therapy for Cancer, Mie Univ. Graduate School of Medicine··S685
- 3-4-12 Pivot-shift phenomenon in anterior cruciate ligament injured knee is associated with laxity in
 contralateral non-injured knee
*Naosuke Nagata, et al.*, Dept. of Orthop. Surg., Kobe Univ. Graduate School of Medicine··S685

17 : 30 ~ 18 : 30	Free papers Spinal trauma	Moderators T. Tsuji, K. Wada
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- 3-4-13 Endovascular embolization for vertebral artery injury associated with cervical vertebrae/cervical
 spinal cord injury
*Genta Fukumoto, et al.*, Dept. of Orthop. Surg., Japanese Red Cross Kobe Hosp.··S686
- 3-4-14 Diffuse idiopathic skeletal hyperostosis induces severe cervical spinal cord injury despite of
 minor traumas
*Tomonori Nakata, et al.*, Dept. of Emerg. and Crit. Care Med., Wakayama Medical Univ.··S686
- 3-4-15 Diffuse idiopathic skeletal hyperostosis is a risk factor for cervical spinal canal stenosis and
 non-traumatic cervical spinal cord injury
*Kenta Nakamura, et al.*, Dept. of Orthop. Surg., Wakayama Medical Univ.··S687
- 3-4-16 Malnutrition is an independent risk factor for residual severe disability after conservative
 treatment for osteoporotic vertebral fractures
*Tetsuto Yamaura, et al.*, Dept. of Orthop. Surg., Hyogo College of Medicine··S687
- 3-4-17 Relationship between reduction rate of vertebral body height by vertebral body stent augmentation
 (VBS) and AO spine-DGOU osteoporotic fracture classification
*Akira Fukushima, et al.*, Dept. of Orthop. Surg., Hokkaido Orthop. Memorial Hosp.··S688

- 3-4-18 Risk factors for dysphagia in elderly patients with cervical spinal cord injury: Involvement of preinjury nutritional status
 *Naoki Segi, et al.*, Dept. of Orthop./Rheumatology, Musculoskeletal and Cutaneous Surg.,
 Program in Integrated Medicine, Graduate School of Medicine, Nagoya Univ.··S688

3rd Day May 25 Room 5

8 : 00 ~ 9 : 00 Free papers Lumbar spine pathology Moderators O. Shirado, T. Sakai

- 3-5-1 Temporal changes and effect on low back pain of lumbar Schmorl's node with Modic change
 *Hiroataka Yan, et al.*, Dept. of Orthop. Surg., Iwate Medical Univ.··S689
- 3-5-2 Investigation of risk factors for the occurrence of Modic changes in the lumbar spine: A 11-year follow-up study
 *Kenji Kobayashi, et al.*, Dept. of Orthop. Surg., Fukushima Medical Univ.··S689
- 3-5-3 Decreased grip strength is associated with paraspinal muscular oxidative stress in human females with lumbar degenerative disease
 *Ryosuke Takahashi, et al.*, Dept. of Orthop. Surg., Juntendo Univ. Urayasu Hosp.··S690
- 3-5-4 Clinical impact of surgical treatment on lipid metabolism in patients with lumbar spinal diseases: Lipid metabolism and lumbar spinal diseases
 *Yukio Nakajima, et al.*, Dept. of Orthop. Surg., Fujita Health Univ.··S690
- 3-5-5 Validation of bone like image in each stage of lumbar spondylosis: Heading towards a reduction of medical radiation exposure
 *Yutaka Kinoshita, et al.*, Dept. of Orthop.,
 Institute of Biomedical Sciences, Tokushima Univ. Graduate School··S691
- 3-5-6 Serum periostin is associated with intervertebral disc degeneration
 *Hayato Ito, et al.*, Dept. of Orthop. Surg., Saga Univ.··S691

9 : 15 ~ 10 : 00 JOA academic encourage award Moderator N. Hosogane

- 3-5-AE-1 Krüppel-like factor-4 and -2 are important regulators of joint tissue cells and protect against tissue destruction and inflammation in osteoarthritis
 *Manabu Kawata*, Dept. of Molecular Medicine,
 Scripps Research/ Dept. of Orthop. Surg., The Univ. of Tokyo··S692
- 3-5-AE-2 The mechanosensitive ion channel PIEZO1 is expressed in tendons and regulates physical performance
 *Ryo Nakamichi, et al.*, Dept. of Orthop. Surg., Science of Functional Recovery and Reconstruction, Faculty of Medicine, Dentistry, and Pharmaceutical Sciences, Okayama Univ.··S692
- 3-5-AE-3 High tibial osteotomy reduces symptoms and synovial inflammation in knee osteoarthritis accompanied by macrophage phenotypic change from M1 to M2
 *Shigeo Yoshida, et al.*, Dept. of Orthop. Surg., Hayashi Hosp.··S693

10 : 30 ~ 11 : 30 Free papers Computer assisted surgery Moderators H. Kaneko, T. Sato

- 3-5-7 Robotics for spine surgery safety: Comparison of CBT screw insertion using a spine surgery assist robot and patient-adaptive guides
 *Ken Tomochika, et al.*, Dept. of Orthop. Surg., St. Marianna Univ. School of Medicine··S694
- 3-5-8 Accuracy of robotic arm-assisted versus CT-based navigation for cup orientation and positioning in THA using the DAA in supine position
 *Tomoya Okazaki, et al.*, Dept. of Orthop. Surg., Yamaguchi Univ. Graduate School of Medicine··S694
- 3-5-9 Corrective osteotomy for malunited distal radius fracture using the augmented reality (AR) osteotomy guide
 *Masaru Munemori, et al.*, Dept. of Orthop. Surg.,
 Graduate School of Biomedical and Health Sciences, Hiroshima Univ.··S695

- 3-5-10 Measurement of the acetabular cup orientation after total hip arthroplasty based on 3D reconstruction from radiographs using generative adversarial networks
 *Akira Fujita, et al.*, Dept. of Orthop. Surg., Kyoto Univ.··S695
- 3-5-11 Intra-operative passive flexion kinematics of osteoarthritic knees before and after UKA
 *Takatoshi Morooka, et al.*, Dept. of Orthop. Surg., Nishinomiya Kaisei Hosp.··S696
- 3-5-12 Evaluation of the usefulness of Mako system during stem placement of total hip arthroplasty: Accuracy of the enhance mode *Yasuaki Tamaki, et al.*, Dept. of Orthop., Institute of Biomedical Sciences, Tokushima Univ. Graduate School··S696

12 : 00 ~ 13 : 10	Luncheon seminar 28	Moderator T. Miyamoto
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- 3-5-LS28 Clinical and basic aspects of cell therapy for osteoarthritis
 *Taku Saito*, Orthop. Surg., Sensory and Motor System Medicine, Surgical Sciences, Graduate School of Medicine, The Univ. of Tokyo··S697

13 : 25 ~ 14 : 25	Free papers	Moderators K. Uchiyama, M. Akutsu
Hip: Pain & pathophysiology		

- 3-5-13 Etiology and epidemiology of osteoarthritis of the hip in Japan
 *Taishi Sato, et al.*, Dept. of Orthop. Surg., Clinical Medicine, Graduate School of Medical Sciences, Kyushu Univ.··S698
- 3-5-14 Perioperative risk factors for persistent pain after total hip arthroplasty
 *Shinichi Ueki, et al.*, Dept. of Orthop. Surg., Graduate School of Biomedical and Health Sciences, Hiroshima Univ.··S698
- 3-5-15 Relationship between osteoarthritis due to developmental dysplasia of the hip and degeneration of the sacroiliac joint
 *Taketoshi Yasuda, et al.*, Dept. of Orthop. Surg., Faculty of Medicine, Univ. of Toyama··S699
- 3-5-16 Frequency of greater trochanter fractures in anterolateral supine approach THA and the effect of greater trochanter morphology on fractures
 *Yuta Shimizu, et al.*, Dept. of Orthop. Surg., Hamamatsu Univ. School of Medicine··S699
- 3-5-17 Comparison of labrum injury before and after rotational acetabular osteotomy using radial MRI
 *Kei Sano, et al.*, Dept. of Orthop. Surg., Juntendo Univ. Urayasu Hosp.··S700
- 3-5-18 Effect of total hip arthroplasty on bone mineral density: A study using an AI osteoporosis diagnostic assistance system
 *Hisatoshi Ishikura, et al.*, Dept. of Orthop. Surg., The Univ. of Tokyo Hosp., The Univ. of Tokyo··S700

14 : 40 ~ 16 : 00	Symposium 52	Moderators A. Sakai, T. Miyamoto
Osteoporosis liaison service and prevention of secondary fractures		

- 3-5-S52-1 Secondary fracture prevention after fragility fractures of the distal radius
 *Yoshiaki Yamanaka, et al.*, Dept. of Orthop. Surg., School of Medicine, Univ. of Occupational and Environmental Health··S701
- 3-5-S52-2 Prevention of secondary fractures after vertebral fractures
 *Naohisa Miyakoshi, et al.*, Dept. of Orthop. Surg., Akita Univ. Graduate School of Medicine··S701
- 3-5-S52-3 Initiatives of the preventing of second fracture for hip fractures
 *Ichiro Nakayama, et al.*, Dept. of Orthop. Surg., Shimada Medical Center··S702
- 3-5-S52-4 Multidisciplinary approach to prevent secondary fractures after geriatric hip fractures
 *Etsuo Shoda, et al.*, Dept. of Orthop. Surg., Nishinomiya Watanabe Hosp.··S702
- 3-5-S52-5 Collaboration between acute care hospitals and clinics in secondary prevention of osteoporotic fragility fractures *Toshiaki Kotani, et al.*, Dept. of Orthop. Surg., Seirei Sakura Citizen Hosp.··S703

16 : 15 ~ 17 : 15	Instructional lecture 46	Moderator T. Kitamura
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3-5-EL46 Rehabilitation therapy of shoulder disorders
*Toru Morihara, et al.*, Marutamachi Rehabilitation Clinic...S704

17 : 30 ~ 18 : 30	Free papers Rotator cuff tear	Moderators N. Taniguchi, N. Yamamoto
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- 3-5-19 Inferior subscapularis and hypertrophic teres minor contribute to preventing superior migration of humeral head
*Toshifumi Tamura, et al.*, Dept. of Orthop. Surg., Kumamoto General Hosp. JCHO...S705
- 3-5-20 Assessment of the tear pattern using radial-slice magnetic resonance images and the retear rate after primary rotator cuff repair
*Yuto Watanabe, et al.*, Dept. of Orthop. Surg., Asahikawa-Kosei General Hosp....S705
- 3-5-21 Factors associated with histological degeneration of the rotator cuff tendon stump in patients undergoing arthroscopic rotator cuff repair
*Takuya Tokunaga, et al.*, Dept. of Orthop. Surg., Faculty of Life Sciences, Kumamoto Univ....S706
- 3-5-22 Long-term postoperative results of rotator cuff tear cases based on recovery of the rotator cuff musculature
*Yuya Kotagiri, et al.*, Shoulder Medical Center, North Alps Medical Center Azumi Hosp....S706
- 3-5-23 Patient characteristics and surgical outcome of rotator cuff tears with a remnant attached to the footprint*Chikara Watanabe, et al.*, Dept. of Orthop. Surg.,
 Graduate School of Biomedical and Health Sciences, Hiroshima Univ....S707
- 3-5-24 Activation status of BMP signaling in a modified rotator cuff tear arthropathy model
*Tomohiro Iuchi, et al.*, Dept. of Orthop. Surg.,
 Graduate School of Medical and Dental Sciences, Kagoshima Univ....S707

3rd Day May 25 Room 6

8 : 00 ~ 9 : 00	Invited lecture 17	Moderator K. Sato
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- 3-6-IL17-1 Wrist fractures and skeletal fragility*Tamara D. Rozental*, Dept. of Orthop. Surg.,
 Beth Israel Deaconess Medical Center, Boston, MA, USA...S708
- 3-6-IL17-2 Our effort for osteoporosis treatment at the newly established hospital
*Masanori Nakayama, et al.*, Dept. of Orthop. Surg.,
 International Univ. of Health and Welfare...S708

9 : 15 ~ 10 : 15	Invited lecture 18	Moderator E. Horii
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- 3-6-IL18-1 Current understanding of thumb hypoplasia
*Soumen Das De*, Dept. of Hand & Reconstructive Microsurgery,
 National Univ. Health System, Singapore, Singapore...S709
- 3-6-IL18-2 Current understanding of thumb polydactyly*Takehiko Takagi*, Dept. of Orthop. Surg.,
 National Center for Child Health and Development...S709

10 : 25 ~ 11 : 45	Fellow session	Moderator T. Kunisada
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- 3-6-FS-1 Management of ankle fractures in medically complex patients
*Kelly K. Hynes*, Dept. of Orthop. Surg., Univ. of Chicago, Chicago, IL, USA...S710
- 3-6-FS-2 A sports surgeons experience in Afghanistan and beyond
*Lucas S. McDonald*, Dept. of Orthop. Surg.,
 Naval Medical Center San Diego, San Diego, CA, USA...S710

- 3-6-FS-3 Controversies in the management of minimally displaced lateral compression type 1 pelvic ring fractures*Joshua A. Parry*, Dept. of Orthop. Surg., Denver Health, Denver, CO, USA...S711
- 3-6-FS-4 Comparative utilization of laminoplasty in the United States and Japan
.....*Byron F. Stephens, et al*, Dept. of Orthop. Surg.,
Vanderbilt Univ. Medical Center, Nashville, TN, USA...S711
- 3-6-FS-5 AI driven wearable/interactive technology for quantitative physical assessment
.....*Joseph H. Schwab*, Dept. of Orthop Surg., Cedars Sinai Hosp., Los Angeles, CA, USA...S712
- 3-6-FS-6 Graft length changes and optimal knee flexion angles for fixation in posterolateral corner reconstruction: An *in vivo* three-dimensional simulation analysis
.....*Kwangho Chung, et al.*, Dept. of Orthop. Surg., Yonsei Univ., Seoul, Korea...S712
- 3-6-FS-7 Is surgical treatment of jones fracture still necessary?: A comparative study assessed with the foot function index-revised short form questionnaire
.....*Jiyoun Kim*, Dept. of Orthop. Surg., Kosin Univ. College of Medicine, Busan, Korea...S713
- 3-6-FS-8 Does the difference in deployment configuration of all suture anchors used in arthroscopic Bankart repair affect clinical and radiological outcomes?
.....*Jae-Hoo Lee, et al.*, Dept. of Orthop. Surg.,
Inje Univ., Ilsan Paik Hosp., Goyang-si, Korea...S713
- 3-6-FS-9 The role of intra-articular injection of platelet-rich plasma in patients with knee osteoarthritis: A placebo-controlled randomized controlled trial
.....*Lewis Ping-Keung Chan*, Dept. of O&T, Univ. of Hong Kong, Hong Kong...S714

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Luncheon seminar 29

Moderator M. Ikeuchi

- 3-6-LS29 Osteoarthritis of the knee treatment based on treatment guidelines and current status of PRP therapy*Masataka Deie*, Hiroshima City Hiroshima Citizens Hosp...S715

13 : 25 ~ 14 : 25

Free papers

Moderators M. Kameyama, R. Oda

Hand & elbow: Nerve & tendon

- 3-6-1 Consideration of carpal tunnel syndrome and amyloid deposition
.....*Shota Hibi, et al.*, Dept. of Orthop. Surg., Japanese Red Cross Hamamatsu Hosp...S716
- 3-6-2 The thumb motion deficits in carpal tunnel syndrome affected specific ADL movements based on the pinching*Akira Kodama, et al.*, Dept. of Orthop. Surg.,
Graduate School of Biomedical and Health Sciences, Hiroshima Univ...S716
- 3-6-3 Association between T2 mapping of the median nerve and in the carpal tunnel electrophysiological severity*Harunori Kondo, et al.*, Dept. of Orthop. Surg., Fujita Health Univ...S717
- 3-6-4 The utility of preoperative magnetic resonance imaging in diagnosing cubital tunnel syndrome and predicting postoperative nerve recovery*Yusuke Miyashima, et al.*, Dept. of Orthop. Surg.,
Osaka Metropolitan Univ. Graduate School of Medicine...S717
- 3-6-5 Usefulness of wide awake surgery for paralyzed hand reconstruction
.....*Mineyuki Zukawa, et al.*, Dept. of Orthop. Surg., Faculty of Medicine, Univ. of Toyama...S718
- 3-6-6 Biomechanical study comparing newly devised tendon lengthening suture method to conventional interlacing suture*Hideaki Miyamoto, et al.*, Dept. of Orthop. Surg., Teikyo Univ...S718

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Moderator T. Arai

- 3-6-EL47 Pathology and treatment of lateral epicondylitis
.....*Takuro Wada*, Dept. of Orthop. Surg., Saiseikai Otaru Hosp...S719

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Invited lecture 19

Moderator Y. Mikami

- 3-6-IL19-1 Distal nerve transfers in brachial plexus and peripheral nerve injuries
.....*Terrence Jose Jerome Joseph*, Dept. of Orthop. Surg., Olympia Hosp., Trichy, India...S720

3-6-IL19-2 Functioning free muscle transfer for reconstruction of brachial plexus injury
 *Yasunori Hattori, et al.*, Dept. of Orthop. Surg., Ogori Daiichi General Hosp. ...S720

17 : 10 ~ 18 : 30	Symposium 53	Moderators S. Arai, M. Moriyama
Current status and issues related to musculoskeletal screening		

- 3-6-S53-1 Current status and issues on musculoskeletal examination by school physicians
 *Yoshiro Saito, et al.*, Tokushima Medical Association ...S721
- 3-6-S53-2 Current status and issues of musculoskeletal examinations
 *Mie Matsuzaki*, Ministry of Education, Culture, Sports, Science and Technology ...S721
- 3-6-S53-3 True state and problem of musculoskeletal examination in Osaka City
 *Koji Kishima, et al.*, Dept. of Orthop. Surg., Kishima Central Hosp. ...S722
- 3-6-S53-4 Considerations on the results of scoliosis screening in different dressing conditions
 *Masatoshi Yoshinao*, Yoshinao Orthop. Clinic ...S722
- 3-6-S53-5 After care of musculoskeletal examinations *Hisakazu Tachiiri*, Tachiiri Orthop. Clinic ...S723
- 3-6-S53-6 The result of the questionnaire research (2022) of the school medical screening for locomotive organ by JCOA *Sadao Arai*, Arai Orthop. Clinic ...S723

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8 : 00 ~ 9 : 00	Instructional lecture 48	Moderator H. Hoshino
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3-7-EL48 Let's get the ball rolling: How to kick start in hip arthroscopy
 *Hajime Utsunomiya*, Tokyo Sports & Orthop. Clinic ...S724

12 : 00 ~ 13 : 10	Luncheon seminar 30	Moderator Y. Ishibashi
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3-7-LS30 Pathology of knee osteoarthritis and various conservative treatments
 *Yoshihiro Nishida*, Dept. of Rehabilitation, Nagoya Univ. Hosp. ...S724

13 : 25 ~ 14 : 25	Free papers Knee: General 1	Moderators Y. Yamamoto, A. Kuwasawa
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- 3-7-1 Can the tibial ACL attachment be an intraoperative reference point to define the joint line in total knee arthroplasty? *Takashi Nakamura, et al.*, Dept. of Orthop. Surg., Toho Univ. (Omori) ...S725
- 3-7-2 Intraoperative and postoperative factors affecting patient-reported outcome after ACL reconstruction: A multicenter study *Atsuo Nakamae, et al.*, Dept. of Orthop. Surg.,
 Graduate School of Biomedical and Health Sciences, Hiroshima Univ. ...S725
- 3-7-3 The effect of posterior tibial slope on graft maturity after anterior cruciate ligament reconstruction
 *Hiroki Shimodaira, et al.*, Dept. of Orthop. Surg., Shinshu Univ. ...S726
- 3-7-4 Change in patellar width ratio after medial patellofemoral ligament reconstruction for recurrent patellar dislocation
 *Rika Shigemoto, et al.*, Dept. of Orthop. Surg., Kobe Univ. Graduate School of Medicine ...S726
- 3-7-5 Comparison of clinical outcomes after lateral meniscal repair in young and middle-aged patients
 *Kodai Hamaoka, et al.*, Dept. of Orthop. Surg., Sapporo Medical Univ. ...S727
- 3-7-6 Horizontal tears of the medial meniscus are accompanied by anterior-posterior and medial displacement *Yusuke Yanatori, et al.*, Dept. of Orthop. Surg.,
 Graduate School of Medical Sciences, Kanazawa Univ. ...S727

14 : 40 ~ 16 : 00	Symposium 54	Moderators A. Okawa, Y. Inaba
Challenges in diagnosing surgical site infections		

3-7-S54-1 Surgical site infections which were difficult to make diagnosis after spinal surgery
 *Koji Yamada, et al.*, Nakanoshima Orthop. ...S728

3-7-S54-2	Difficult diagnostic cases of infected total hip arthroplasty <i>Takao Setoguchi, et al.</i> , Dept. of Orthop. Surg., Japanese Red Cross Kagoshima Hosp.···S728
3-7-S54-3	Review of culture-negative cases among the periprosthetic knee joint infection cases at our hospital <i>Kiyonori Mizuno, et al.</i> , Dept. of Orthop. Surg., Anshin Hosp.···S729
3-7-S54-4	Clinical cases of fracture related infection with difficulty in diagnosis <i>Akihiro Maruo</i> , Dept. of Orthop. Surg., Harima Himeji General Medical Center···S729
3-7-S54-5	Surgical site infections in athletes: Diagnosis and management <i>Ryo Matsunaga, et al.</i> , Antlers Sports Clinic···S730
3-7-S54-6	Tips and tricks for diagnosis of surgical site infection in bone and soft tissue tumor surgery <i>Takeshi Morii, et al.</i> , Dept. of Orthop. Surg., Kyorin Univ.···S730

16 : 15 ~ 17 : 15	Free papers	THA: Surgical result	Moderators	K. Nihei, M. Morita
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3-7-7	Intramuscular adipose tissue in the quadriceps femoris is an independent factor associated with postoperative outcomes in unilateral hip osteoarthritis patient <i>Hiroki Iida, et al.</i> , Dept. of Orthop./Rheumatology, Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine, Graduate School of Medicine, Nagoya Univ.···S731
3-7-8	Enhanced recovery after total hip arthroplasty <i>Takahito Yuasa, et al.</i> , Dept. of Orthop. Surg., Kawakita General Hosp.···S731
3-7-9	The long-term results of total hip arthroplasty with cemented stems <i>Kan Sasaki, et al.</i> , Dept. of Orthop. Surg., Yamagata Saisei Hosp.···S732
3-7-10	Clinical outcomes of total hip arthroplasty combined with subtrochanteric osteotomy for dislocated hips after Schanz osteotomy <i>Masanori Fujii, et al.</i> , Dept. of Orthop. Surg., Saga Univ.···S732
3-7-11	The effects for the postoperative clinical result due to the hip center locations after primary total hip arthroplasty <i>Eiji Takahashi, et al.</i> , Dept. of Orthop. Surg., Kanazawa Medical Univ.···S733
3-7-12	Long-term outcomes of Mayo conservative hip system in young patients <i>Masanori Nishi, et al.</i> , Dept. of Orthop. Surg., Sassa General Hosp.···S733

17 : 30 ~ 18 : 30	Free papers	Adult spinal deformity	Moderators	B. Otsuki, H. Moridaira
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3-7-13	Validation of mechanical complications (MCs) after adult spinal deformity(ASD) surgery: Evaluation by lordosis shape, lordosis prediction formula, and gap score <i>Tomoya Kanto, et al.</i> , Dept. of Orthop. Surg., Dokkyo Medical Univ. Hosp.···S734
3-7-14	ADL disorders and its predictors after correction surgery for adult spinal deformity <i>Noto Ono, et al.</i> , Dept. of Orthop. Surg., Kansai Medical Univ.···S734
3-7-15	Low Hounsfield unit values are a risk factor for postoperative mechanical complications for adult spinal deformities: A multicenter study <i>Ippei Yamauchi, et al.</i> , Dept. of Orthop./Rheumatology, Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine, Graduate School of Medicine, Nagoya Univ.···S735
3-7-16	Factors influencing postoperative satisfaction in adult spinal deformity surgery patients <i>Tsukasa Yanase, et al.</i> , Dept. of Orthop. Surg., Dokkyo Medical Univ. Saitama Medical Center···S735
3-7-17	Factors associated with improved lumbar spine function after adult spinal deformity surgery <i>Fumihiko Arizumi, et al.</i> , Dept. of Orthop. Surg., Hyogo College of Medicine···S736
3-7-18	Post-operative shift in pain profile following fusion surgery for adult spinal deformity: A cluster analysis <i>So Kato, et al.</i> , Dept. of Orthop. Surg., The Univ. of Tokyo Hosp., The Univ. of Tokyo···S736

3rd Day May 25 Room 8

8 : 00 ~ 9 : 00 Free papers Knee: General 2 Moderators Y. Arai, Y. Hashimoto

- 3-8-1 Saucerization of complete discoid lateral meniscus is associated with change of morphology of the lateral femoral condyle and tibial plateau
 *Takuya Kinoshita, et al.*, Dept. Orthop. Surg., Osaka Saiseikai Nakatsu Hosp. ...S737
- 3-8-2 Change in MCL over time after MCL pie-crust-evaluation by MR
 *Yuji Kanaya, et al.*, Dept. of Orthop. Surg., Shin-Kaminokawa Hosp. ...S737
- 3-8-3 Jumper's knee is not a self-limiting condition: 11 years follow up of a cohort of young volleyball players
 *Tetsuo Yamaguchi, et al.*, Tokushima Univ.,
 Graduate School of Technology, Industrial and Social Sciences ...S738
- 3-8-4 MRI and X-ray evaluation of growth plate closure at the knee
 *Takashi Omi, et al.*, Dept. of Orthop. Surg., Osaka City General Hosp. ...S738
- 3-8-5 Long-term outcome at 10 years after autologous chondrocyte cell-sheet transplantation
 *Kosuke Hamahashi, et al.*, Dept. of Orthop. Surg., Surgical Science, Tokai Univ. ...S739
- 3-8-6 Postoperative mid-term outcomes of autologous chondrocyte implantation: Data from a multicenter study in Chiba prefecture (CaTCh study)
 *Ryuichiro Akagi, et al.*, Knee Surg. Sports Med. Center, Oyumino Central Hosp. ...S739

9 : 15 ~ 10 : 15 Invited lecture 20 Moderator H. Tohyama

- 3-8-IL20-1 Advantages of weight-bearing CT imaging for earlier and more accurate detection, diagnosis and longitudinal monitoring of knee osteoarthritis features
 *Neil A. Segal*, Rehab. Med., Univ. of Kansas, Kansas City, KS, USA ...S740
- 3-8-IL20-2 3D limb alignment of knee osteoarthritis
 *Takeo Nagura, et al.*, Dept. of Orthop. Surg., Keio Univ. ...S740

10 : 30 ~ 11 : 30 Invited lecture 21 Moderator M. Takagi

- 3-8-IL21-1 Current concepts in venous thromboembolism epidemiology, prevention and treatment
 *Javad Parvizi*, Acibadem Univ., International Joint Center, Istanbul, Turkey ...S741
- 3-8-IL21-2 Prevention and treatment of venousthromboembolism based on the mechanism of thrombus formation
 *Shinya Goto*, Dept. of Medicine (Cardiology), Tokai Univ. School of Medicine ...S741

12 : 00 ~ 13 : 10 Luncheon seminar 31 Moderator S. Imagama

- 3-8-LS31-1 Treatment strategy for hip spine syndrome with bone fragility: A hip surgeon's perspective
 *Koji Goto*, Dept. of Orthop. Surg., Kindai Univ. Faculty of Medicine ...S742
- 3-8-LS31-2 Understanding hip-spine syndrome/relation: Insights from a spine surgeon
 *Mitsuru Yagi*, Dept. of Orthop. Surg., International Univ. of Health and Welfare ...S742

13 : 25 ~ 14 : 25 Free papers Spine: New technology Moderators H. Funao, H. Nakashima

- 3-8-7 Association of advanced glycation end-products measured by skin autofluorescence with pain and patient-reported outcomes in patients with compressive cervical myelopathy
 *Toru Doi, et al.*, Dept. of Orthop. Surg., Tokyo Women's Medical Univ. ...S743
- 3-8-8 Prediction of cervical spondylosis classification using deep learning with convolutional neural network
 *Hiroyuki Tachi, et al.*, Dept. of Orthop. Surg.,
 Faculty of Medicine and Graduate School of Medicine, Hokkaido Univ. ...S743

3-8-24 Usefulness of microsurgery using augmented reality (AR) for spinal dumbbell tumor
 *Yuji Tsuchikawa, et al.*, Dept. of Orthop. Surg.,
 Hiroshima City North Medical Center Asa Citizens Hosp. ...S751

17 : 30 ~ 18 : 30 Invited lecture 22 Moderator H. Sugiyama

3-8-IL22-1 Evolution of hip arthroscopy over the past 25 years
 *Marc J. Philippon*, The Steadman Clinic and Steadman Philippon Research Institute,
 Vail, CO, USA ...S752

3-8-IL22-2 Current evolving hip arthroscopic management for hip capsule and acetabular dysplasia
 *Soshi Uchida*, Dept. of Orthop. Surg.,
 Wakamatsu Hosp. of the Univ. of Occupational and Environmental Health ...S752

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**8 : 00 ~ 9 : 00 Free papers Moderators S. Kobayashi, Y. Kokubo
 Pelvis & proximal femur fractures**

3-9-1 Epidemiology of fragility fractures of the pelvic ring: A regional population-based study in Japan
 *Jiro Ando, et al.*, Dept. of Orthop. Surg., Jichi Medical Univ. ...S753

3-9-2 Most vertically unstable pelvic ring injuries can be treated by screw fixation
 *Yasuhisa Ueda*, Dept. of Emerg. Crit. Care, Saitama Med. Center ...S753

3-9-3 Development of AI to detect the sacrum from XP: Towards clinical application of AI to diagnose
 sacral fractures *Naoya Inagaki, et al.*, Dept. of Orthop. Surg.,
 The Kashiwa Hosp. of the Jikei Univ. School of Medicine ...S754

3-9-4 Comparison of implant outcomes in the Pauwels type 3 internal fixation for femoral neck fracture:
 Multicenter (TRON group) retrospective study
 *Takahiro Suzuki, et al.*, Dept. of Orthop./Rheumatology, Musculoskeletal and Cutaneous Surg.,
 Program in Integrated Medicine, Graduate School of Medicine, Nagoya Univ. ...S754

3-9-5 Change after the introduction of area classification in proximal femoral fracture
 *Yosuke Iwamoto, et al.*, Omagari Kosei Medical Center ...S755

3-9-6 Patients with femoral trochanteric fractures suffer from postoperative malnutrition and do not
 improve early *Yoshiharu Sugiyama, et al.*, Dept. of Orthop. Surg., Shizuoka City Shizuoka Hosp. ...S755

9 : 15 ~ 10 : 15 Invited lecture 23 Moderator I. Yoshimura

3-9-IL23-1 Osteochondral lesion of talus: What is the evidence?
 *Jin Woo Lee*, Dept. Orthop. Surg., Yonsei Univ. College of Medicine, Seoul, Korea ...S756

3-9-IL23-2 State of art of the ankle arthroscopy: Arthroscopic surgery for lateral instability of the ankle
 *Masato Takao*, CARIFAS, Jujo Hosp. ...S756

12 : 00 ~ 13 : 10 Luncheon seminar 32 Moderator K. Nishida

3-9-LS32 Basic background, transition and history in the treatment of spine deformity and spine tumor
 *Satoru Demura*, Dept. of Orthop. Surg.,
 Graduate School of Medical Sciences, Kanazawa Univ. ...S757

13 : 25 ~ 14 : 25 Free papers Osteoporosis: Spine Moderators E. Nakamura, M. Takahata

3-9-7 Low Hounsfield unit values on computed tomography predicts vertebral fracture in patients with
 rheumatoid arthritis *Akane Umeda, et al.*, Dept. of Orthop. Surg., Kyoto Univ. Hosp. ...S758

- 3-9-8 Severe fatty degeneration of paraspinal muscles is risk factor for domino osteoporotic vertebral fractures
 *Tomoyuki Kusakawa, et al.*, Dept. of Orthop. Surg., Hyogo College of Medicine...S758
- 3-9-9 Malnutrition and spinal sagittal malalignment are risk factors of new vertebral fractures
 *Yuji Yokozeki, et al.*, Dept. of Orthop. Surg., Kitasato Univ...S759
- 3-9-10 Investigation of bone resilience index combining bone density and bone quality for fracture discrimination and severity
 *Takuji Matsumoto, et al.*, Dept. of Orthop. Surg., Nokami Kosei General Hosp...S759
- 3-9-11 Patterns of symptoms and insufficiency fractures in patients with tumor-induced osteomalacia
 *Hiroshi Kobayashi, et al.*, Dept. of Orthop. Surg., The Univ. of Tokyo Hosp., The Univ. of Tokyo...S760
- 3-9-12 Visceral fat is strongly associated with the severity of spinal ligament ossification
 *Tsutomu Endo, et al.*, Dept. of Orthop. Surg.,
 Faculty of Medicine and Graduate School of Medicine, Hokkaido Univ...S760

14 : 40 ~ 15 : 40	Afternoon seminar 3	Moderator T. Omodani
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- 3-9-AS3-1 The frontiers of PRP therapy: A new PRP of PRP therapy utilizing diversity
 *Yuuki Shimizu*, Inagihirao Seikei Clinic...S761
- 3-9-AS3-2 Low risk endoscopic carpal tunnel release surgery using 1.9 mm pencil-type nano arthroscopy system in the clinic *Takamitsu Okada*, Okada Orthop. Clinic...S761

15 : 55 ~ 17 : 05	Free papers Clinical safety	Moderators K. Sugimoto, T. Suzuki
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- 3-9-13 Diagnosis of popliteal artery injury: The factors of delayed diagnosis
 *Naoki Maegawa, et al.*, Dept. of Emergency and Critical Care., Nara Medical Univ...S762
- 3-9-14 Early diagnosis of popliteal artery injury: Is pulse oximeter useful?
 *Naoki Maegawa, et al.*, Dept. of Emergency and Critical Care., Nara Medical Univ...S762
- 3-9-15 Medical accidents related to orthopaedic cases in operating room: Analysis of the national multicenter database
 *Shiho Nakano, et al.*, Dept. of Orthop. Surg., Toho Univ. Sakura Medical Center...S763
- 3-9-16 Fall rate and risk factors for falls in orthopaedic inpatient
 *Tetsuo Hagino, et al.*, Dept. of Orthop. Surg., NHO Kofu National Hosp...S763
- 3-9-17 Scattered and direct radiation dose measurement during examination of orthopaedics
 *Eiji Morikawa*, Dept. of Orthop. Surg., Shikoku Medical Center for Children and Adults...S764
- 3-9-18 Evaluation of transportation of patient by air ambulance in Akita Prefecture
 *Yuji Hatakeyama, et al.*, Dept. of Orthop. Surg., Akita Red Cross Hosp...S764
- 3-9-19 Radiation exposure due to CT navigated technique in adolescent idiopathic scoliosis
 *Kazuta Yamashita, et al.*, Dept. of Orthop.,
 Institute of Biomedical Sciences, Tokushima Univ. Graduate School...S765

17 : 30 ~ 18 : 30	Invited lecture 24	Moderator H. Murakami
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- 3-9-IL24-1 Is bacteria a possible cause for low back pain
 *S. Rajasekaran*, Dept. of Orthop. Surg., Ganga Hosp., Coimbatore, India...S766
- 3-9-IL24-2 Treatment strategies for lumbar degenerative diseases
 *Nobuyuki Fujita*, Dept. of Orthop. Surg., Fujita Health Univ...S766

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8 : 00 ~ 9 : 00 Free papers RA 1 Moderators J. Hashimoto, T. Mochizuki

- 3-10-1 Central sensitivity syndrome affects the disease activity index and satisfaction with treatment in patients with rheumatoid arthritis
 *Kazushige Seki, et al.*, Dept. of Orthop. Surg., Yamaguchi Univ. Graduate School of Medicine...S767
- 3-10-2 Fewer opportunities to speak out is associated with frailty in rheumatoid arthritis patients
 *Yasumori Sobue, et al.*, Dept. of Orthop. Surg.,
 Japanese Red Cross Aichi Medical Center Nagoya Daiichi Hosp....S767
- 3-10-3 What foot disorders in rheumatoid arthritis worsen locomotive syndrome
 *Takeshi Kashiwagura, et al.*, Dept. of Orthop. Surg., Akita City Hosp....S768
- 3-10-4 Comparison of exercise function and body composition in elderly women with rheumatoid arthritis and elderly women in general
 *Takaya Sugiura, et al.*, Dept. of Orthop./Rheumatology, Musculoskeletal and Cutaneous Surg.,
 Program in Integrated Medicine, Graduate School of Medicine, Nagoya Univ....S768
- 3-10-5 Prevalence and relationship study of sarcopenia and frailty in rheumatoid arthritis from multicenter prospective observational PRESENT study
 *Masahiro Tada, et al.*, Dept. of Orthop. Surg., Osaka City General Hosp....S769
- 3-10-6 Stable control of disease activity alone is not enough to make patients with rheumatoid arthritis robust: Multicenter observational study T-FLAG
 *Yoshifumi Ohashi, et al.*, Dept. of Orthop./Rheumatology, Musculoskeletal and Cutaneous Surg.,
 Program in Integrated Medicine, Graduate School of Medicine, Nagoya Univ....S769

9 : 15 ~ 10 : 15 Invited lecture 25 Moderator M. Ito

- 3-10-IL25-1 Pediatric spinal deformity: Non radiologic outcomes that matter to patients
 *Marinus De Kleuver*, Dept. of Orthop. Surg. Radboud Univ. Med. Center,
 Nijmegen, The Netherlands...S770
- 3-10-IL25-2 Challenges in the treatment of adolescent idiopathic scoliosis and navigation in the era of the 100-year lifespan
 *Kota Watanabe*, Dept. of Orthop. Surg., Keio Univ....S770

10 : 30 ~ 11 : 30 Invited lecture 26 Moderator T. Akazawa

- 3-10-IL26-1 Adult spinal deformity complications: Development and utility of the ISSG-AO complication score
 *Eric O. Klineberg*, Dept. of Orthop. Surg., UTHealth Houston, Houston, TX, USA...S771
- 3-10-IL26-2 3-column osteotomy for adult spinal deformity
 *Yu Yamato*, Dept. of Orthop. Surg., Hamamatsu Univ. School of Medicine...S771

12 : 00 ~ 13 : 10 Luncheon seminar 33 Moderator S. Ohtori

- 3-10-LS33 Knowing, analyzing, and treating low back pain
 *Takuya Nikaido*, Dept. of Orthop. Surg., Fukushima Medical Univ....S772

13 : 25 ~ 14 : 25 Invited lecture 27 Moderator M. Neo

- 3-10-IL27-1 Are adjacent segment pathology and pseudoarthrosis following ACDF the result of karmaic factors or of iatrogenic causes
 *Chi-Chien Niu*, Orthop. Dept. of Chang-Gung Memorial Hosp. at Linko,
 Chang-Gung Univ. Taoyuan, Taiwan (ROC)...S773
- 3-10-IL27-2 Surgical outcome and complications following ACDF
 *Masao Koda*, Dept. of Orthop. Surg., Univ. of Tsukuba...S773

14 : 40 ~ 15 : 40 Invited lecture 28 Moderator K. Nakanishi

- 3-10-IL28-1 Surgical management of cervical ossification of the longitudinal ligament
 *Yoon Ha*, Dept. of Neuro. Surg., Severance Hosp., Yonsei Univ., Seoul, Korea...S774
- 3-10-IL28-2 Pathophysiology of cervical OPLL.....*Toshitaka Yoshii*, Dept. of Orthop. and Spinal Surg.,
 Graduate School of Medical and Dental Sciences, Tokyo Medical and Dental Univ....S774

**15 : 55 ~ 17 : 15 Symposium 55 Moderators Y. Nishida, A. Kido
 Cutting-edge musculoskeletal rehabilitation therapy: Goal setting from a pathological viewpoint**

- 3-10-S55-1 Regenerative medicine and rehabilitation medicine for knee osteoarthritis
 *Yusuke Inagaki, et al.*, Dept. of Rehabilitation Medicine, Nara Medical Univ....S775
- 3-10-S55-2 Regenerative medicine for spinal cord injury using rehabilitation
*Narihito Nagoshi, et al.*, Dept. of Orthop. Surg., Keio Univ....S775
- 3-10-S55-3 Regenerative medicine and rehabilitation for sports injuries
 *Yoshitomo Saita, et al.*, Dept. of Sports and Regenerative Medicine, Juntendo Univ....S776
- 3-10-S55-4 Strategy to maintain and improve ADL and QOL for tenosynovial giant cell tumor
 *Akihiko Takeuchi, et al.*, Dept. of Orthop. Surg.,
 Graduate School of Medical Sciences, Kanazawa Univ....S776
- 3-10-S55-5 Molecular mechanisms of rheumatoid arthritis and rehabilitation therapy
 *Yoshitada Sakai*, Div. of Rehabilitation Medicine,
 Kobe Univ. Graduate School of Medicine...S777

17 : 30 ~ 18 : 30 Invited lecture 29 Moderator K. Ikari

- 3-10-IL29-1 Trabecular metal lateral ankle arthroplasty 11 year experience with 550 cases
*Lew C. Schon*, Orthop. Innovation Institute of Foot and
 Ankle Reconstruction Mercy Medical Center, Baltimore, MD,
 USA/ Orthop. New York Univ. Grossman School of Medicine, New York, NY, USA...S778
- 3-10-IL29-2 Advanced techniques to achieve precise orthogonal alignment in lateral transfibular total
 ankle arthroplasty for severe varus cases
 *Yuki Tochigi*, Dept. of Orthop. Surg., Dokkyo Medical Univ. Saitama Medical Center...S778

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8 : 00 ~ 9 : 00 Instructional lecture 49 Moderator N. Samoto

- 3-11-EL49 Pathophysiology and concepts of hallux valgus and flatfoot.....*Kazuya Ikoma*, Dept. of Orthop.,
 Graduate School of Medical Science, Kyoto Prefectural Univ. of Medicine...S779

9 : 15 ~ 10 : 15 Free papers Upper limb fracture Moderators H. Hashizume, S. Kono

- 3-11-1 Pathomechanism of the proximal humeral fractures: How does the four-part fracture occur?
 *Hiroataka Sano, et al.*, Div. of Orthop., Sendai City Hosp....S780
- 3-11-2 Intramedullary nail for proximal humeral fracture should be placed within 4 mm from the bony
 surface of humeral head *Hiroataka Sano, et al.*, Div. of Orthop., Sendai City Hosp....S780
- 3-11-3 Intra-articular corrective osteotomy for distal radius intra-articular malunion using patient-matched
 instruments: A prospective, multicenter trial
 *Kunihiro Oka, et al.*, Dept. of Orthop. Biomaterial Science,
 Graduate School of Medicine, Osaka Univ....S781

- 3-11-4 Fracture location and shape of lister's tubercle are related with the EPL tendon rupture in undisplaced distal radius fractures *Taichi Saito, et al.*, Dept. of Sports Medicine, Faculty of Medicine, Dentistry, and Pharmaceutical Sciences, Okayama Univ. ...S781
- 3-11-5 Effects of possible sarcopenia and nutritional status on postoperative functional outcomes of distal radius fractures in geriatric females *Takafumi Hosokawa, et al.*, Dept. of Orthop. Surg., Tone Chuo Hosp. ...S782
- 3-11-6 3D computational anatomy of volar aspect of the scaphoid: For use in volar buttress plate fixation for scaphoid nonunion *Atsushi Yokota, et al.*, Dept. of Orthop. Surg., Osaka Medical and Pharmaceutical Univ. ...S782

10 : 30 ~ 11 : 30	100-year lifespan lecture 3	Moderator S. Matsubara
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- 3-11-100YL3 Lessons from centenarians and the very old about healthy longevity *Yasumichi Arai*, CSMR, Keio Univ. ...S783

12 : 00 ~ 13 : 10	Luncheon seminar 34	Moderator H. Haro
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- 3-11-LS34-1 Lumbar interbody fusion treatment strategy for patients with osteoporosis based on abaloparatide *Yukihiro Matsuyama*, Dept. of Orthop. Surg., Hamamatsu Univ. School of Medicine ...S784
- 3-11-LS34-2 The essence of spinopelvic fusion in long fusion for adult spinal deformity *Hiroshi Taneichi*, Dept. of Orthop. Surg., Dokkyo Medical Univ. ...S784

13 : 25 ~ 14 : 45	Create the future symposium 1	Moderators Y. Tanaka, T. Yamaoka
Hot-topic biomaterials: Expectations for applications in orthopaedics		

- 3-11-CFS1-1 Development of cell-based regenerative dental treatments *Hiroshi Egusa*, Div. of Mol. and Regen. Prosthodont., Tohoku Univ. Grad. School of Dent. ...S785
- 3-11-CFS1-2 Biomaterials for control of bone matrix anisotropy based on its biological mechanisms *Aira Matsugaki, et al.*, Grad. Eng., Osaka Univ. ...S785
- 3-11-CFS1-3 Extracellular vesicle-based therapy in osteoarthritis *Norimasa Nakamura*, Osaka Health Science Univ. ...S786
- 3-11-CFS1-4 Development of a novel medical device derived from biological tissue for knee anterior cruciate ligament reconstruction *Kiyotaka Iwasaki*, Fac. of Sci. and Eng., Waseda Univ. ...S786
- 3-11-CFS1-5 Smart polymer technologies for orthopaedic surgery *Mitsuhiro Ebara*, NIMS ...S787

15 : 00 ~ 16 : 30	Create the future symposium 2	Moderators T. Nagura, M. Yamamoto
Medical-engineering collaborative technology in the field of orthopaedics		

- 3-11-CFS2-1 Medical device development by general orthopaedic surgeons: Individual limitations, medical-industrial collaboration and cooperation with companies *Hiroyuki Ogawa*, Dept. of Orthop. Surg., Hokuuikai Kinen Hosp. ...S788
- 3-11-CFS2-2 Development of a drill equipped with real haptics technology *Shu Kobayashi, et al.*, Dept. of Orthop. Surg., Keio Univ. ...S788
- 3-11-CFS2-3 Development of silver-containing hydroxyapatite (Ag-HA) coated lumbar interbody cage *Tadatsugu Morimoto*, Dept. of Orthop. Surg., Saga Univ. ...S789
- 3-11-CFS2-4 Myoelectric prostheses for traumatic amputees and congenital transverse failures *Takehiko Takagi*, Dept. of Orthop. Surg., National Center for Child Health and Development ...S789
- 3-11-CFS2-5 Development and clinical application of patient-matched instruments *Kunihiko Oka, et al.*, Dept. of Orthop. Biomaterial Science, Graduate School of Medicine, Osaka Univ. ...S790

- 3-11-CFS2-6 New developments in biomechanics research using robotic systems for joint mechanical testing: Compressive loads applied to ligaments' entheses
 *Hikomichi Fujie, et al.*, Faculty of Systems Design & Med-Eng.
 Collaborative Research Center, Tokyo Metropolitan Univ. ...S790

16 : 45 ~ 18 : 05 Create the future symposium 3 Moderators K. Hayakawa, Y. Takakubo
How to successfully balance your career and child-raising

- 3-11-CFS3-1 Balancing childcare and career: From my experience of raising triplets
 *Yuki Fujita*, Dept. of Orthop. Surg., Hirosaki Univ. Graduate School of Medicine ...S791
- 3-11-CFS3-2 Diverse work styles of female orthopaedic surgeons: Career development as a medical educator
 *Akiko Torii, et al.*, Dept. of Orthop. Surg., Keio Univ. ...S791
- 3-11-CFS3-3 What should we do for balancing work and child raising?: The message from the administrative position
 *Hiromi Sasaki, et al.*, Dept. of Orthop. Surg.,
 Graduate School of Medical and Dental Sciences, Kagoshima Univ. ...S792
- 3-11-CFS3-4 Our department's efforts to encourage male doctors to take childcare leave
 *Akemi Suzuki, et al.*, Dept. of Orthop. Surg., Yamagata Univ. ...S792
- 3-11-CFS3-5 The key point for not to sacrifice carrier and parenting for doctors couple
 *Akihiro Maruo*, Dept. of Orthop. Surg., Harima Himeji General Medical Center ...S793
- 3-11-CFS3-6 Men's participation in childcare from Nagasaki University
 *Takashi Miura, et al.*, Dept. of Cardiovasc. Surg., Nagasaki Univ. Hosp. ...S793

3rd Day May 25 Room 12

8 : 00 ~ 9 : 00 Instructional lecture 50 Moderator M. Tanaka

- 3-12-EL50 Japanese historical transition of surgeries for adolescent idiopathic scoliosis
 *Koki Uno*, Dept. of Orthop. Surg., Kobe Medical Center ...S794

9 : 15 ~ 10 : 15 Free papers Spinal monitoring Moderators M. Ando, S. Taniguchi

- 3-12-1 Does SEP decrease at the same time for Tc-MEP alarm?: A prospective multicenter study
 *Hideki Shigematsu, et al.*, Dept. of Orthop. Surg., Nara Medical Univ. ...S795
- 3-12-2 Impact of preoperative motor status for the positive predictive value of transcranial motor-evoked potentials alerts in thoracic spine surgery
 *Masahiro Funaba, et al.*, Dept. of Orthop. Surg., Yamaguchi Univ. Graduate School of Medicine ...S795
- 3-12-3 Longitudinal study of intraoperative neuromonitoring outcome during ossification of posterior longitudinal ligament surgery
 *Go Yoshida, et al.*, Dept. of Orthop. Surg., Hamamatsu Univ. School of Medicine ...S796
- 3-12-4 The incidence and alert timing of spontaneous electromyographic activity during cervical ossification of the posterior longitudinal ligament surgery
 *Jun Hashimoto, et al.*, Dept. of Advanced Technology in Medicine,
 Graduate School of Medical and Dental Sciences, Tokyo Medical and Dental Univ. ...S796
- 3-12-5 What kind of cases need post tetanic motor evoked potentials during spinal surgery?
 *Takahiro Mui, et al.*, Dept. of Orthop. Surg., Nara Medical Univ. ...S797
- 3-12-6 Evaluation of the lumbar neural activity after stimulation of the femoral, saphenous, and lateral femoral cutaneous nerve using magnetoneurography
 *Hisato Higashikawa, et al.*, Dept. of Orthop. and Spinal Surg.,
 Graduate School of Medical and Dental Sciences, Tokyo Medical and Dental Univ. ...S797

10 : 30 ~ 11 : 30	Instructional lecture 51	Moderator H. Tsumura
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3-12-EL51 Cybersecurity in healthcare organizations to keep patient safety by securing information systems and medical devices ··· *Kengo Miyo*, National Center for Global Health and Medicine···S798

12 : 00 ~ 13 : 10	Luncheon seminar 35	Moderator S. Okada
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3-12-LS35 The era of Japanese orthopaedics “seikei-geka” that marks end: Ultrasound-guided intervention for neuropathic pain ·········· *Hiroshi Minagawa*, Joto Orthop. Clinic···S798

13 : 25 ~ 14 : 25	Afternoon seminar 4	Moderator S. Matsuda
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3-12-AS4-1 Next-generation portable navigation for TKA using augmented reality
·········· *Hiroyuki Ogawa*, Dept. of Orthop. Surg., Hokusuikai Kinen Hosp.···S799

3-12-AS4-2 Augmented reality-assisted portable navigation system for knee arthroplasty:
Surgical technique and precision
·········· *Sachiyuki Tsukada, et al.*, Dept. of Orthop. Surg., Hokusuikai Kinen Hosp.···S799

14 : 40 ~ 15 : 40	Instructional lecture 52	Moderator M. Ishikawa
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3-12-EL52 Regeneration of articular cartilage and meniscus: Present status and future perspective
·········· *Nobuo Adachi, et al.*, Dept. of Orthop. Surg.,
Graduate School of Biomedical and Health Sciences, Hiroshima Univ.···S800

15 : 55 ~ 16 : 55	Instructional lecture 53	Moderator M. Tanaka
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3-12-EL53 Clinical ethics for better clinical practice ··· *Kei Takeshita*, Dept. of Medical Ethics, Tokai Univ.···S800

17 : 10 ~ 18 : 30	Symposium 56	Moderators Y. Tanaka, C. Watanabe
Practical use of ultrasound-guided interventions in out-patient care		

3-12-S56-1 Ultrasound-guided intervention for frozen shoulder
·········· *Kazuma Miyatake, et al.*, Musculoskeletal Science,
Yokohama City Univ. Graduate School of Medicine···S801

3-12-S56-2 State of the art of ultrasound-guided treatment for lateral epicondylitis
·········· *Toru Omodani*, Tokyo Advanced Orthop.···S801

3-12-S56-3 Ultrasound-guided intervention for PIP joint contracture associated with flexor tendinitis
·········· *Yasuaki Nakanishi, et al.*, Center for Postgraduate Training, Nara Medical Univ.···S802

3-12-S56-4 Ultrasound-guided intervention for pain after lumbar fusion
·········· *Hiroshi Iwasaki, et al.*, Dept. of Orthop. Surg., Wakayama Medical Univ.···S802

3-12-S56-5 Ultrasonographic intervention for osteoarthritis of knee joint
·········· *Junsuke Nakase, et al.*, Dept. of Orthop. Surg.,
Graduate School of Medical Sciences, Kanazawa Univ.···S803

3-12-S56-6 Ultrasound guided intervention for ankle sprain
·········· *Jun Sasahara, et al.*, Teikyo Univ. Institute of Sports Sciences & Medicine···S803

3rd Day May 25 Poster

9 : 00 ~ 9 : 35	Poster (Booth No.7, Marine Messe Fukuoka Hall A)	Moderator Y. Miyawaki
Lumbar spine minimally invasive treatment		

3-Po-1 MRI characteristics of disc degeneration after condoliase injection in young patients:
A consecutive case series ·········· *Kazuyoshi Kobayashi*, Dept. of Orthop. Surg.,
Japanese Red Cross Aichi Medical Center Nagoya Daini Hosp.···S804

- 3-Po-2 Is condoliase therapy effective for patients under 20 years old?
*Tomohiro Banno, et al.*, Div. of Surg. Care Morimachi, Hamamatsu Univ. School of Medicine...S804
- 3-Po-3 Results of using condoliase (Hernicore®) for lumbar disc herniation: Study on atypical cases
*Muneaki Masuda, et al.*, Dept. of Orthop. Surg., Spinal Injuries Center...S805
- 3-Po-4 A study on the effect time of condoliase treatment for lumbar disc herniation
*Hirokatsu Sawada, et al.*, Dept. of Orthop. Surg., Nihon Univ...S805
- 3-Po-5 Assessment of the transition and effect of condoliase therapy for lumbar disc herniation in
 2 centers for 5 years*Kazuhiro Fujimoto, et al.*, Dept. of Orthop. Surg.,
 Yamaguchi Univ. Graduate School of Medicine...S806
- 3-Po-6 Intradiscal injection of autologous platelet-rich plasma (PRP) for the treatment of lumbar
 intervertebral disc disease: Mid-term follow-up survey
*Koki Kawaguchi, et al.*, Dept. of Musculoskeletal Surg.,
 Dept. of Multimodality Therapy for Cancer, Mie Univ. Graduate School of Medicine...S806
- 3-Po-7 Key points of surgical technique and initial surgical outcomes regarding microscopic minimum
 incision transforaminal lumbar interbody fusion (MI method)
*Taku Ogura, et al.*, Dept. of Orthop. Surg., Kyoto Chubu Medical Center...S807

9 : 00 ~ 9 : 35	Poster (Booth No.8, Marine Messe Fukuoka Hall A)	Moderator S. Suzuki
Adult spinal deformity 1		

- 3-Po-8 Lumbar lordosis restoration by minimally invasive short-segment fusion with anterior column
 realignment (ACR) for adult spinal deformity: Minimum 2-year follow-up
*Yoichi Tani, et al.*, Dept. of Orthop. Surg., Kansai Medical Univ...S808
- 3-Po-9 Radiographic and MRI evidence of indirect neural decompression after the anterior column
 realignment procedure for adult spinal deformity
*Yoichi Tani, et al.*, Dept. of Orthop. Surg., Kansai Medical Univ...S808
- 3-Po-10 Segmental short fusion surgery for chronic low back pain with bone marrow edema adjacent to
 the vertebral endplate*Toshio Nakamae, et al.*, Dept. of Orthop. Surg.,
 Graduate School of Biomedical and Health Sciences, Hiroshima Univ...S809
- 3-Po-11 Change of spinal alignment and revision surgeries after short fusions for degenerative
 lumbar scoliosis
*Shougo Fukase, et al.*, Dept. of Orthop. Surg., Hakodate Central General Hosp...S809
- 3-Po-12 Clinical outcome and surgical indication of short fusion for lumbar adult spinal deformity with
 postural abnormality*Hideaki Nakajima, et al.*, Dept. of Orthop. and Rehabilitation Medicine,
 Faculty of Medical Sciences, Univ. of Fukui...S810
- 3-Po-13 Classifying spinal deformities in surgical cases according to the sagittal touched vertebra levels
*Yuki Mihara, et al.*, Dept. of Orthop. Surg., Hamamatsu Univ. School of Medicine...S810
- 3-Po-14 Conditions for achieving postoperative pelvic incidence-lumbar lordosis < 10° in circumferential
 minimally invasive surgery for adult spinal deformity
*Masayuki Ishihara, et al.*, Dept. of Orthop. Surg., Kansai Medical Univ...S811

9 : 00 ~ 9 : 35	Poster (Booth No.9, Marine Messe Fukuoka Hall A)	Moderator T. Tetsunaga
Spinal osteoporosis 1		

- 3-Po-15 Lower preoperative vertebral bone quality score as a risk factor for poor 5-year clinical outcomes
 after lumbar spine surgery*Hiroshi Taniwaki, et al.*, Dept. of Orthop. Surg.,
 Osaka Metropolitan Univ. Graduate School of Medicine...S812
- 3-Po-16 Investigation of facet fusions after surgery for thoracolumbar vertebral fractures: More than half
 of cases have facet fusions*Ryo Sasaki, et al.*, Dept. of Orthop. Surg., Saiseikai Nakatsu Hosp...S812

- 3-Po-17 Comparative study of reconstructive surgery with lateral lumbar interbody fusion versus vertebral body replacement for lumbar osteoporotic vertebral burst fractures
*Kazuo Doi, et al.*, Dept. of Orthop. Surg., Dokkyo Medical Univ.···S813
- 3-Po-18 Short-term results of silver oxide-containing hydroxyapatite coating cages in elderly and osteoporotic patients*Masatsugu Tsukamoto, et al.*, Dept. of Orthop. Surg., Saga Univ.···S813
- 3-Po-19 Mechanical evaluation of posterior fixation surgery in osteoporotic vertebral fractures complicated by DISH*Yo Hirano*, Dept. of Orthop. Surg., Fujita Health Univ. Bantane Hosp.···S814
- 3-Po-20 Safety of cement-augmented pedicle screws and the risk of intravenous cement leakage: A multicenter retrospective study*Shinji Takahashi, et al.*, Dept. of Orthop. Surg., Osaka Metropolitan Univ. Graduate School of Medicine···S814
- 3-Po-21 Risk of cement leakage in cement augmented fenestrated pedicle screw*Tomoaki Kanai, et al.*, Dept. of Orthop. Surg., The Jikei Univ. School of Medicine···S815

9 : 00 ~ 9 : 35	Poster (Booth No.10, Marine Messe Fukuoka Hall A)	Moderator H. Ogawa
Around knee osteotomy 1		

- 3-Po-22 Evaluation of the patient satisfaction with implant removal after open wedge high tibial osteotomy*Junya Hara, et al.*, Dept. of Orthop. Surg., Fukuoka Univ.···S816
- 3-Po-23 Factors related to patient satisfaction and expectations after high tibial osteotomy*Naosuke Nagata, et al.*, Dept. of Orthop. Surg., Kobe Univ. Graduate School of Medicine···S816
- 3-Po-24 Establishing an optimal CSI score cut-off value affecting postoperative outcomes of AKO*Shoichi Hasegawa, et al.*, Dept. of Orthop. Surg., Tokyo Medical and Dental Univ. Hosp.···S817
- 3-Po-25 Lateral joint laxity at knee flexion before open-wedge high tibial osteotomy can improve postoperative patient satisfaction*Yusuke Yamawaki, et al.*, Dept. of Orthop. Surg., Graduate School of Medicine, Kyoto Univ.···S817
- 3-Po-26 Central sensitization is a detrimental factor for patient-reported outcomes after around the knee osteotomy*Yusuke Nakagawa, et al.*, Dept. of Orthop. Surg., Tokyo Medical and Dental Univ. Hosp.···S818
- 3-Po-27 Return to sport after inverted V-shaped high tibial osteotomy*Taku Ebata, et al.*, Dept. of Orthop. Surg., Faculty of Medicine and Graduate School of Medicine, Hokkaido Univ.···S818
- 3-Po-28 Breakthrough of the return to sports activities after around knee osteotomy*Hirofumi Hanada, et al.*, Dept. of Orthop. Surg., Fukuoka Rehabilitation Hosp.···S819

9 : 00 ~ 9 : 35	Poster (Booth No.11, Marine Messe Fukuoka Hall A)	Moderator T. Yamasaki
FAI: Arthroscopic surgery		

- 3-Po-29 Examination of acetabular coverage and labrum tears in painful hip disorders by age group*Naoki Sugita, et al.*, Dept. of Orthop. Surg., Saitama Medical Univ.···S820
- 3-Po-30 Evaluation of changes in femoral head center after arthroscopic surgery for FAI using patient-specific 3D CT models*Shota Higashihira, et al.*, Dept. of Orthop. Surg., Yokohama City Univ. Medical Center···S820
- 3-Po-31 Investigation of hip-sacroiliac syndrome in hip arthroscopy cases*Moriyuki Noguchi*, Dept. of Orthop. Surg., JCHO Sendai Hosp.···S821
- 3-Po-32 Clinical outcomes of arthroscopic labrum repair without correcting bone morphology*Yuichi Kuroda, et al.*, Dept. of Orthop. Surg., Kobe Univ. Graduate School of Medicine···S821
- 3-Po-33 A study on return to sport after hip arthroscopy*Takeshi Seki, et al.*, Dept. of Orthop. Surg., Tokyo Medical Univ.···S822
- 3-Po-34 Hip arthroscopy without capsulotomy for the hip with borderline acetabular dysplasia*Takashi Toyoda, et al.*, Dept. of Orthop. Surg., Kansai Medical Univ.···S822

- 3-Po-35 Minimum 5-year outcomes and risk factor of conversion to THA after arthroscopic FAI surgery in patients aged 40 or over *Hirotaaka Nakashima, et al.*, Dept. of Orthop. Surg., Wakamatsu Hosp. of the Univ. of Occupational and Environmental Health...S823

9 : 00 ~ 9 : 35 Poster (Booth No.12, Marine Messe Fukuoka Hall A) Moderator Y. Yasunaga
Hip fracture: Imaging & bone density

- 3-Po-36 Evaluation of the muscles around the healthy side hip joint by preoperative CT in patients with femoral neck fracture *Katsuya Yokoyama, et al.*, Dept. of Orthop. Surg., Tokai Univ., Hachioji Hosp....S824
- 3-Po-37 Elucidating the optimal treatment of coronal shear fractures of the femoral neck using finite element analysis *Hiroaki Kijima, et al.*, Dept. of Orthop. Surg., Akita Univ. Graduate School of Medicine...S824
- 3-Po-38 Effect of residual valgus deformity on the incidence of avascular necrosis and late segmental collapse in non-displaced femoral neck fractures *Takeshi Ishihara, et al.*, Dept. of Orthop. Surg., Kobe Red Cross Hosp....S825
- 3-Po-39 Bone density prediction using frontal hip radiographic images *Akihiro Kanamaru, et al.*, Dept. of Orthop. Surg., Okayama Rosai Hosp....S825
- 3-Po-40 Relationship between CT Hounsfield units at injury and bone mineral density in femoral trochanteric fractures in elderly *Chuji Terada, et al.*, Dept. of Orthop. Surg., Fukuyama City Hosp....S826
- 3-Po-41 Introduction rate of osteoporosis drugs in patients who underwent bipolar hip arthroplasty in our hospital *Yusuke Iesaki, et al.*, Nagoya Medical Center...S826
- 3-Po-42 Changes in surgical waiting time and osteoporosis treatment for proximal femoral fractures: Retrospective study of the fracture liaison service *Katsuhiko Kawabata, et al.*, Dept. of Orthop. Surg., Fukuyama City Hosp....S827

9 : 00 ~ 9 : 35 Poster (Booth No.1, Marine Messe Fukuoka Hall B) Moderator M. Amako
Frozen shoulder & calcific tendinitis

- 3-Po-43 Contribution of oxidative stress to idiopathic frozen shoulder *Hironori Tsurukami, et al.*, Dept. of Orthop. Surg., Juntendo Univ. Urayasu Hosp....S828
- 3-Po-44 Factors affecting clinical outcome or recurrence after manipulation under anesthesia (MUA) for frozen shoulder *Hiroki Ohzono, et al.*, Kurume Univ. Medical Center...S828
- 3-Po-45 Factors influencing prognosis of shoulder manipulation under ultrasound-guided cervical nerve root block for frozen shoulder: A retrospective cohort study *Ryosuke Takahashi, et al.*, Dept. of Orthop. Surg., Ichinomiya Nishi Hosp....S829
- 3-Po-46 Preoperative factors related with postoperative MRI changes after shoulder manipulation for stiff shoulder *Hiroshi Negi, et al.*, Dept. of Orthop. Surg., Hiroshima-Nishi Medical Center...S829
- 3-Po-47 Adverse reactions after vaccination with novel coronavirus vaccine and SIRVA *Yasuki Omori, et al.*, Dept. of Orthop. Surg., Yodogawa Christian Hosp....S830
- 3-Po-48 Canceled
- 3-Po-49 Clinical outcomes of combined focused shock wave and ultrasound-guided needling therapy for chronic calcific tendinitis of the shoulder *Yu Hiraoka, et al.*, Dept. of Orthop. Surg., Graduate School of Medicine, Chiba Univ....S831

9 : 00 ~ 9 : 35 Poster (Booth No.2, Marine Messe Fukuoka Hall B)

Moderator S. Orita

Osteoporosis: Evaluation 1

- 3-Po-50 Peripheral bones, especially the distal tibia, predict bone microarchitecture of the proximal femur *Junya Mukai, et al.*, Dept. of Orthop. Surg., Nagasaki Univ. Graduate School of Biomedical Sciences...S832
- 3-Po-51 Does the deltoid tuberosity index measured in chest X-ray correlate with bone mineral density? *Tadahiro Hori, et al.*, Dept. of Orthop. Surg., Fukuyama City Hosp....S832
- 3-Po-52 Is the cortical thickness index useful for severe osteoporosis screening? *Tadahiro Hori, et al.*, Dept. of Orthop. Surg., Fukuyama City Hosp....S833
- 3-Po-53 Intuitive diagnosis of osteoporosis using X-ray and CT *Chikara Hayakawa*, Dept. of Orthop. Surg., Showa Univ....S833
- 3-Po-54 Distributions of bone mineral density and trabecular bone score in Japanese elderly women with vertebral fracture: A cross-sectional study *Yasuyuki Omichi, et al.*, Dept. of Orthop., Tokushima Municip. Hosp....S834
- 3-Po-55 Investigating the initial effect of different therapeutic agents in severe osteoporosis: Bone mineral density (BMD) and trabecular bone score (TBS) *Yoshihiro Ishihama, et al.*, Dept. of Orthop. Surg., Suihou Daiichi Hosp....S834
- 3-Po-56 Usefulness of EchoS system for ultrasonic bone densitometry compared to DXA technique *Hotaka Ishizu, et al.*, Dept. of Orthop. Surg., Faculty of Medicine and Graduate School of Medicine, Hokkaido Univ....S835

9 : 00 ~ 9 : 35 Poster (Booth No.3, Marine Messe Fukuoka Hall B)

Ankle 2 Moderator T. Nakasa

- 3-Po-57 3D model MRI study of lateral ankle ligament injury morphology *Satoru Sakurai*, Dept. of Orthop. Surg., Graduate School of Biomedical and Health Sciences, Hiroshima Univ....S836
- 3-Po-58 Investigation of the usefulness of telos device in chronic anterior talofibular ligament injury: The danger of underestimating talar tilting angle *Kazunari Oshima, et al.*, Hitsujigaoka Hosp./Dept. of Orthop. Surg., Seirei Hamamatsu General Hosp....S836
- 3-Po-59 Talus rotation before and after arthroscopic lateral ankle ligament repair *Seiya Tomonaga, et al.*, Dept. of Orthop. Surg., Fukuoka Univ....S837
- 3-Po-60 Does the number of PRP injections influence the outcome?: A randomized comparative trial using an osteochondral injury model *Youichi Yasui, et al.*, Dept. of Orthop. Surg., Teikyo Univ....S837
- 3-Po-61 Passive ankle plantarflexion position and skin surface blood flow adjacent to the Achilles tendon *So Minokawa, et al.*, Dept. of Orthop. Surg., Chikushi Hosp., Fukuoka Univ....S838
- 3-Po-62 Examination of the measurement of trunk sway with smart insoles *Takashi Yamaga, et al.*, Dept. of Hand Surg., Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine, Graduate School of Medicine, Nagoya Univ....S838
- 3-Po-63 Bone mineral density investigation of the subchondral bone of the ankle and subtalar joints in patients with chronic ankle instability *Shunsuke Nakamura, et al.*, Dept. of Orthop. Surg., Graduate School of Medical and Dental Sciences, Kagoshima Univ....S839

9 : 00 ~ 9 : 35 Poster (Booth No.4, Marine Messe Fukuoka Hall B)

Moderator K. Nakagawa

Basic research: Inflammation & implant

- 3-Po-64 DAP12/TREM2 signaling affects excessive bone resorption after discontinuation of anti-RANKL antibody *Hotaka Ishizu, et al.*, Dept. of Orthop. Surg., Faculty of Medicine and Graduate School of Medicine, Hokkaido Univ....S840

- 3-Po-65 Analysis of up-regulated microRNA in synovial fluid on osteonecrosis of the femoral head
 *Hideki Shozen, et al.*, Dept. of Orthop. Surg.,
 Graduate School of Biomedical and Health Sciences, Hiroshima Univ.··S840
- 3-Po-66 Molecular profiling of galectin-3 in arthritis
 *Kosei Nakajima, et al.*, Dept. of Orthop. Surg., Okayama Univ. of Science··S841
- 3-Po-67 TNFR2-mediated activation of fibroblast-like synoviocytes in RA
 ··· *Kazuhiro Nishikawa, et al.*, Dept. of Orthop. Surg., Gunma Univ. Graduate School of Medicine··S841
- 3-Po-68 Investigation of suitable thread depth value for bioabsorbable screws that combine function
 and strength *Shinji Imade, et al.*, Dept. of Orthop., Shimane Univ.··S842
- 3-Po-69 Bone ingrowth into a porous structure
 *Yusuke Takaoka, et al.*, Dept. of Orthop. Surg., Tenri Hosp.··S842
- 3-Po-70 The mechanism of biofilm formations of staphylococcus aureus isolated from
 periprosthetic joint infections
 *Keigo Yonemoto, et al.*, Dept. of Orthop. Surg., The Jikei Univ. School of Medicine··S843

9 : 00 ~ 9 : 35	Poster (Booth No.5, Marine Messe Fukuoka Hall B)	Moderator H. Mihara
Clinical safety		

- 3-Po-71 Current status and measures for HBV DNA monitoring in RA patients with resolved hepatitis B
 virus infection at our hospital
 *Kunio Yamada, et al.*, Dept. of Orthop. Surg., Komaki City Hosp.··S844
- 3-Po-72 Safety and feasibility of transportation service using automated driving wheelchair for patients
 with musculoskeletal disorders
 *Hiroshi Takahashi, et al.*, Dept. of Orthop. Surg., Univ. of Tsukuba··S844
- 3-Po-73 Cementless stem extraction from a medical safety perspective
 *Yoshihiro Nakamura, et al.*, Div. of Orthop. Surg.,
 Dept. of Medicine of Sensory and Motor Organs, Faculty of Medicine, Univ. of Miyazaki··S845
- 3-Po-74 Incident analysis of sleeping drugs and falls in orthopaedic diseases
 *Hirokazu Inoue, et al.*, Rehabilitation Center, Jichi Medical Univ. Hosp.··S845
- 3-Po-75 Experience with postoperative compartment syndrome (well leg compartment syndrome) at
 our hospital *Tsuyoshi Ota, et al.*, Dept. of Orthop. Surg., Saiseikai Kawaguchi General Hosp.··S846
- 3-Po-76 Orthopaedics trauma surgery for COVID-19
 *Yoichi Toyoshima, et al.*, Dept. of Orthop. Surg., Ohtsuka Hosp.··S846
- 3-Po-77 The regenerative medicine trend in orthopaedics
 *Yuichiro Ukon, et al.*, Dept. of Orthop. Surg., Graduate School of Medicine, Osaka Univ.··S847

9 : 00 ~ 9 : 35	Poster (English) (Booth No.6, Marine Messe Fukuoka Hall B)	Moderator T. Umezu
Femoral neck fracture		

- 3-Po-78 A reimbursement system based on 48-hour target time for hip fracture surgery shortened the
 waiting time and affected clinical outcomes
 *Tsunemasa Kita, et al.*, Dept. of Orthop. Surg., Miyazaki Medical Association Hosp.··S848
- 3-Po-79 Hip fracture surgery within 48 hours from injury improved short-term mobility
 *Tsunemasa Kita, et al.*, Dept. of Orthop. Surg., Miyazaki Medical Association Hosp.··S848
- 3-Po-80 Can early surgery reduce the need to packed red blood cell transfusion in elderly patients with
 intertrochanteric femur fractures? *Keong-Hwan Kim, et al.*, Dept. of Orthop. Surg.,
 Kangwon National Univ. Hosp., Chuncheon, Korea··S849
- 3-Po-81 Direct anterior versus anterolateral approach in bipolar hemiarthroplasty after femoral neck
 fracture: A randomized controlled trial *Supakit Asawasudsakorn, et al.*, Dept. of Orthop.,
 Maharat Nakhon Ratchasima Hosp., Nakhon Ratchasima, Thailand··S849

- 3-Po-82 Red blood cell distribution width can be a predictor of mortality following hip fracture:
A meta-analysis *Bao T. Nguyen Tu, et al.*, The International Ph.D. Program in Medicine,
College of Medicine, Taipei Medical Univ., Taipei, Taiwan...S850
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*Yusuke Nakagawa, et al.*, Dept. of Orthop. Surg., Tokyo Medical and Dental Univ. Hosp...S987
- 3-Po-323 Characteristics of postoperative body temperature and its association with in-hospital infection after hip fracture surgery
*Shota Mashimo, et al.*, Dept. of Rehab., St. Luke's International Hosp...S987
- 3-Po-324 Treatment for osteoporosis prior to total hip arthroplasty
*Atsuhiko Fujie, et al.*, Dept. of Orthop. Surg., Keio Univ...S988
- 3-Po-325 Influence of greater trochanteric bone density and morphology on perioperative greater trochanteric fracture following total hip arthroplasty via anterolateral approach
*Daisuke Inoue, et al.*, Dept. of Orthop. Surg., Graduate School of Medical Sciences, Kanazawa Univ...S988
- 3-Po-326 The 80-50 problem lying in patients with hip fracture: Nutritional status, contralateral hip fracture, type of residence
*Daigo Morita, et al.*, Dept. of Orthop. Surg., Hamamatsu Medical Center...S989
- 3-Po-327 Factors for anchor perforation in hip arthroscopic surgery
*Kazuki Yamada, et al.*, Dept. of Medical Materials for Musculoskeletal Reconstruction, Faculty of Medicine, Dentistry, and Pharmaceutical Sciences, Okayama Univ...S989
- 3-Po-328 Clinical outcome of the proximal femoral fracture patients with severe aortic stenosis
*Kouji Kita, et al.*, Dept. of Orthop. Surg., Iga City General Hosp...S990

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- 3-Po-329 Characteristics of rheumatoid arthritis patients with moderate or severe hallux valgus deformity
*Keita Nagira, et al.*, Dept. of Orthop. Surg., Tottori Univ...S991
- 3-Po-330 The effectiveness hindfoot endoscopic surgery for posterior ankle impingement syndrome with and without osseous lesions in athletes
*Shota Morimoto, et al.*, Dept. of Orthop. Surg., Hyogo College of Medicine...S991
- 3-Po-331 Pedobarography and ankle-foot kinematics in children with symptomatic flexible flatfoot after medializing calcaneal osteotomy: A cross-sectional study
*Nopphachart Limphaphayom, et al.*, Dept. of Orthop., Chulalongkorn Univ., Bangkok, Thailand...S992
- 3-Po-332 Biological adjuvants in hindfoot arthrodesis: Limited evidence
*Youichi Yasui, et al.*, Dept. of Orthop. Surg., Teikyo Univ...S992

- 3-Po-333 A comparison of outcomes of locking versus nonlocking plate fixation for the distal fibula fractures: A systematic review and meta-analysis
*Rajesh K. Rajnish*, Dept. of Orthop. AIIMS Jodhpur, Rajasthan, India...S993
- 3-Po-334 The effectiveness of the modified side-locking loop suture technique with early accelerated rehabilitation for acute Achilles tendon rupture in athletes
*Mitsuki Shimizu, et al.*, Dept. of Orthop. Surg., Hyogo College of Medicine...S993
- 3-Po-335 Foot biomechanic through modification of the Achilles tendon, to improve athletic performance in football and in ballet dance*Lorenzo Andalaro*, Dept. of Pod Center, Florence, FI, Italy...S994

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- 3-Po-336 Postoperative course of idiopathic scoliosis with proximal thoracic curve involving cervical spine
*Takuya Yamamoto, et al.*, Dept. of Orthop. Surg., Kagoshima City Hosp...S995
- 3-Po-337 Does clinical outcome vary with age in patients with Lenke type 1?
 ...*Tomohiro Banno, et al.*, Div. of Surg. Care Morimachi, Hamamatsu Univ. School of Medicine...S995
- 3-Po-338 Efficacy of vertebral coplanar alignment for hypokyphotic adolescent idiopathic scoliosis to restore physiologic thoracic kyphosis
*Katsutaka Yamada, et al.*, Dept. of Orthop. Surg., Yokohama Brain and Spine Center...S996
- 3-Po-339 Effect of Ponte osteotomy in vertebral coplanar alignment for adolescent idiopathic scoliosis
*Masaki Tomori, et al.*, Dept. of Orthop. Surg., Saiseikai Kawaguchi General Hosp...S996
- 3-Po-340 Report on the minimum detectable measured difference achievement rates for SRS-22 of the coplanar method for idiopathic scoliosis*Junya Katayanagi, et al.*, Dept. of Orthop. Surg., Dokkyo Medical Univ. Saitama Medical Center...S997
- 3-Po-341 Surgical outcomes of adolescent idiopathic scoliosis complicated by lumbar spondylolysis
*Hiroki Oba, et al.*, Dept. of Orthop. Surg., Shinshu Univ...S997
- 3-Po-342 Do sacral and pelvic obliquity change after corrective surgery for adolescent idiopathic scoliosis?
*Masaki Ikejiri*, Dept. of Orthop. Surg., Nara Medical Univ...S998

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- 3-Po-343 Accuracy of pedicle screw placement with three different guided technique in adolescent idiopathic scoliosis: Retrospective study of 1385 screws
*Kazuta Yamashita, et al.*, Dept. of Orthop., Institute of Biomedical Sciences, Tokushima Univ. Graduate School...S999
- 3-Po-344 Accuracy of pedicle screw insertion using navigation for idiopathic scoliosis surgery
*Shunsuke Katsumi, et al.*, Dept. of Orthop. Surg., The Jikei Univ. School of Medicine...S999
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*Masayuki Ishihara, et al.*, Dept. of Orthop. Surg., Kansai Medical Univ...S1000
- 3-Po-346 How do you correct thoracolumbar/lumbar curvature in patients with Lenke type 1 or 2BC?
*Shoji Seki, et al.*, Dept. of Orthop. Surg., Faculty of Medicine, Univ. of Toyama...S1000
- 3-Po-347 Differences in lumbosacral vertebrae bony unions and arthropathic changes in the sacroiliac joints between intra-articular and extra-articular s2-alar-iliac screws?
*Fumito Tanabe, et al.*, Dept. of Orthop. Surg., Kirishima Orthop. Hosp...S1001
- 3-Po-348 Morphological features of the sacroiliac joint and measures for inserting the long S2-alar iliac screw into the optimal position
*Fumito Tanabe, et al.*, Dept. of Orthop. Surg., Kirishima Orthop. Hosp...S1001
- 3-Po-349 More rigid fixation of pelvis increased the angular motion and stress at the hip joint
*Takuhei Kozaki, et al.*, Dept. of Orthop. Surg., Saiseikai Wakayama Hosp...S1002

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- 3-Po-350 Return to work of patients after cervical OPLL surgery based on a multicenter survey
.....*Kanji Mori, et al.*, Dept. of Orthop. Surg., Shiga Univ. of Medical Science...S1003
- 3-Po-351 Comparison of reoperation incidence after anterior versus posterior decompression and fusion
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.....*Soichiro Masuda, et al.*, Dept. of Orthop. Surg., Graduate School of Medicine, Kyoto Univ...S1003
- 3-Po-352 Clinical results with anterior controllable antedisplacement and fusion (ACAF) for cervical
ossification of the posterior longitudinal ligament
.....*Bungo Otsuki, et al.*, Dept. of Orthop. Surg., Graduate School of Medicine, Kyoto Univ...S1004
- 3-Po-353 The efficacy of K-line in the neck-extended position for surgical selection of cervical ossification
of the posterior longitudinal ligament*Hiroto Tokumoto, et al.*, Dept. of Orthop. Surg.,
Graduate School of Medical and Dental Sciences, Kagoshima Univ...S1004
- 3-Po-354 Examination of sacroiliac joint fusion range in DISH (diffuse idiopathic skeletal hyperostosis)
patients and comparison with SpA (spondyloarthritis) patients
.....*Tsuyoshi Nishiume, et al.*, Dept. of Orthop. Surg., Okazaki City Hosp...S1005
- 3-Po-355 Association between the progression of diffuse idiopathic skeletal hyperostosis and the
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.....*Soraya Nishimura, et al.*, Spine & Spinal Cord Center, Kawasaki Municipal Hosp...S1005
- 3-Po-356 Fixation of thoracic pedicle screws in vertebral fractures complicated by DISH (one screw fixed
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- 3-Po-357 Under-correction was associated with residual proinflammatory gene expressions and poor
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.....*Shigeo Yoshida, et al.*, Dept. of Orthop. Surg., Hayashi Hosp...S1007
- 3-Po-358 Clinical course and risk factors to postoperative lateral hinge fractures in medial opening
wedge distal tibial tuberosity osteotomy
.....*Hiroyasu Ogawa, et al.*, Dept. of Orthop. Surg., Div. of Disease Control,
Research field of Medical Sciences, Graduate School of Medicine, Gifu Univ...S1007
- 3-Po-359 A study of the running of the popliteal artery at the adductor hiatus during medial closed
wedge distal femoral osteotomy
.....*Fumiyoshi Kawashima, et al.*, Dept. of Orthop. Surg., Fujigaoka Hosp., Showa Univ...S1008
- 3-Po-360 A case of acute limb ischemia during high tibial osteotomy
.....*Naohiro Uezono, et al.*, Dept. of Orthop. Surg., Imamura General Hosp...S1008
- 3-Po-361 Evaluation of common peroneal nerve injury in closed wedge high tibial osteotomy
.....*Tetsuro Ishimatsu, et al.*, Dept. of Orthop. Surg., Fukuoka Univ...S1009
- 3-Po-362 Anatomy of popliteal artery in distal femoral osteotomy using contrast-enhanced
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.....*Shu Takagawa, et al.*, Dept. of Orthop. Surg., Yokohama City Univ. Medical Center...S1009
- 3-Po-363 Improvement of posterior tibial slope and flexion contracture in hybrid closed wedge high
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- 3-Po-364 Attempt to evaluate various aspects of total hip arthroplasty: Focusing on gait speed, locomotion, physical activity, number of steps
 *Ryoichi Izumida, et al.*, Keiyu Joint Reconstruction Center Edogawa Hosp. ...S1011
- 3-Po-365 Evaluation of the relationship between muscle tendon preservation and gait analysis in total hip arthroplasty ... *Ryuichi Sato, et al.*, Dept. of Orthop. Surg., Kanagawa Rehabilitation Hosp. ...S1011
- 3-Po-366 Global offset and clinical results after total hip arthroplasty in developmental dysplasia of the hip *Akimasa Kimura*, Tamagawa Hosp. ...S1012
- 3-Po-367 The relationship between leg length difference, offset, and clinical outcomes in THA *Bowen Jiang, et al.*, Dept. of Orthop. Surg., Hakodate Central General Hosp. ...S1012
- 3-Po-368 Comparison of one-stage or two-stage total hip arthroplasty using anterolateral-supine approach *Hiroaki Kurishima, et al.*, Dept. of Orthop. Surg., Japanese Red Cross Sendai Hosp. ...S1013
- 3-Po-369 Clinical results of total hip arthroplasty using muscle-sparing direct anterior approach for active patients: A minimum five-year follow-up study
 *Shingo Nitta, et al.*, Dept. of Orthop. Surg., Anshin Hosp. ...S1013
- 3-Po-370 Is combined anteversion technique with AR hip navigation useful in preventing dislocation in total hip arthroplasty? *Tsunehito Ishida, et al.*, Dept. of Orthop. Surg., Tokyo Medical Univ. ...S1014

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 *Rikuo Shinomiya, et al.*, Dept. of Musculoskeletal Traumatology and Reconstructive Surg., Graduate School of Biomedical and Health Sciences, Hiroshima Univ. ...S1016
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- 3-Po-375 Use of primary external fixator in Japan: Study using NDB open data
 *Natsumi Saka, et al.*, Dept. of Orthop. Surg., Teikyo Univ. ...S1017
- 3-Po-376 Video application for emergency transport of patients with amputated fingers and open limb injuries
 *Katsuhiro Tokutake, et al.*, Dept. of Hand Surg., Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine, Graduate School of Medicine, Nagoya Univ. ...S1017

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 *Yusuke Sato, et al.*, Dept. of Orthop. Surg., Nihon Univ. ...S1018
- 3-Po-378 Skin color of soft tissue tumor *Naoto Oebisu, et al.*, Dept. of Orthop. Surg., Osaka Metropolitan Univ. Graduate School of Medicine ...S1018
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 *Manabu Hoshi, et al.*, Dept. of Orthop. Surg., Osaka City General Hosp.··S1020
- 3-Po-382 Intrapulmonary lymph node in sarcoma patients
 *Makoto Emori, et al.*, Dept. of Orthop. Surg., Sapporo Medical Univ.··S1020
- 3-Po-383 Imaging features and radiologic- pathologic correlations of soft tissue sarcoma with infiltrative
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 *Akira Yoneda*, Dept. of Orthop. Surg., Osaka City General Hosp.··S1022
- 3-Po-385 Morphological differences in the proximal tibiofibular joint between ACL intact and ACL
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- 3-Po-387 Relationship increase of medial meniscal extrusion between pre-operation and 2-year follow-up
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 *Ryu Ito, et al.*, Musculoskeletal Pain and Diseases,
 Center for Preventive Medical Sciences, Chiba Univ.··S1023
- 3-Po-388 Short time changes of meniscal extrusion after repair for longitudinal tear of the
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 *Sadayuki Ito, et al.*, Dept. of Orthop./Rheumatology,
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 *Taisuke Seki, et al.*, Dept. of Orthop. Surg., Aichi Medical Univ. Medical Center··S1025
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 *Tatsuru Sonobe, et al.*, Dept. of Orthop. Surg., Fukushima Medical Univ.··S1026

- 3-Po-393 Is there a difference in the progression of locomotive syndrome between coronary and noncoronary scourges in three years?
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- 3-Po-398 Validation of the function of measuring leg extension and offset in a lateral position THA using a tablet device
 *Takeaki Yamamoto, et al.*, Dept. of Orthop. Surg., St. Marianna Univ. School of MedicineS1029
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- 3-Po-400 Differences in pelvic morphology perspective from the ages in THA cases (female only)
 *Soutarou Izumi, et al.*, Dept. of Orthop. Surg., Hiroshima Prefectural Rehabilitation CenterS1030
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- 3-Po-405 Incidence of venous thromboembolism in various hip surgeries: Retrospective study in pulmonary angiographic CT *Nariyoshi Ishii, et al.*, Dept. of Orthop. Surg., Keio Univ.S1033
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- 3-Po-409 The diagnostic value of soluble fibrinmonomer complex and its optimal cutoff values in deep vein thrombosis screening
*Manami Kono, et al.*, Dept. of Orthop. Surg., Teikyo Univ. Chiba Medical Center...S1035
- 3-Po-410 Postoperative delirium impairs ability for walking in hip fracture patients with multiple risk factors for delirium*Junya Kondo*, Dept. of Orthop. Surg., Fukuyama City Hosp....S1036

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- 3-Po-411 Ultrasound and radiological features of supracondylar humerus fractures in children
*Tomohiro Yasuda, et al.*, Dept. of Orthop. Surg., Fujigaoka Hosp., Showa Univ....S1037
- 3-Po-412 Treatment of type III & IV supracondylar fractures humerus in children: An innovative method of CRPP for avoiding conventional complications
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*Nitesh Gahlot*, Dept. of Orthop. Surg., All India Inst. of Med. Sciences, Jod, Raj, India...S1038
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*Aron Kulanathan, et al.*, Brighton and Sussex Medical School, Brighton, UK...S1039
- 3-Po-417 Fixation of simple olecranon fractures using a hybrid intramedullary screw and tension band construct*Neil Jain, et al.*, Dept. of Orthop. Surg., TTUHSC, Lubbock, TX, USA...S1040

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- 3-Po-418 Effect of the COVID-19 pandemic to medical examination of patients with adolescent idiopathic scoliosis*Rena Wakabayashi, et al.*, Dept. of Orthop. Surg., Koto Kosei Hosp....S1041
- 3-Po-419 Development of a method for quantifying waistline asymmetry in scoliosis
*Kazu Kobayakawa, et al.*, Dept. of Orthop. Surg., Clinical Medicine, Graduate School of Medical Sciences, Kyushu Univ....S1041
- 3-Po-420 The correction rate by nighttime brace for adolescent idiopathic scoliosis patients: Good for the lumbar curve*Kenji Kato, et al.*, Dept. of Orthop. Surg., Nagoya City Univ., Graduate School of Medical Sciences...S1042
- 3-Po-421 Psychological stress and evaluation of quality of life in patients with adolescent idiopathic scoliosis under brace treatment: Preliminary report
*Ryo Sugawara, et al.*, Dept. of Spine Surg., JCHO Sendai Hosp....S1042
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- 3-Po-423 Adolescent idiopathic scoliosis tended to be associated with shifted heart to the left and the sternum
*Yuki Mihara, et al.*, Dept. of Orthop. Surg., Hamamatsu Univ. School of Medicine...S1043
- 3-Po-424 Trunk muscle mass and Cobb angle are involved in coronal alignment in patients with idiopathic scoliosis*Yusuke Mimura, et al.*, Dept. of Orthop. Surg., Kitasato Univ....S1044

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- 3-Po-425 Characteristics of postural abnormalities, bone density and skeletal muscle mass in patients with Parkinson's disease*Hiroki Matsui, et al.*, Dept. of Orthop. Surg., National Center for Geriatrics and Gerontology...S1045
- 3-Po-426 Impact of diabetes mellitus on adult spinal deformity surgery*Tomohiro Yamada, et al.*, Dept. of Orthop. Surg., Hamamatsu Univ. School of Medicine...S1045
- 3-Po-427 The impact of frailty on postoperative courses in surgically-treated older patients with adult spinal deformity*Shunji Tsutsui, et al.*, Dept. of Orthop. Surg., Wakayama Medical Univ...S1046
- 3-Po-428 Effect of disease activity on the progression of scoliosis in patients with rheumatoid arthritis*Shintaro Honda, et al.*, Dept. of Orthop. Surg., Graduate School of Medicine, Kyoto Univ...S1046
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- 3-Po-430 Impact of osteoporosis on gait after corrective fusion surgery for adult spinal deformity: A study using three-dimensional gait analysis*Hideyuki Arima, et al.*, Nx-CEC Hamamatsu Univ. School of Medicine...S1047
- 3-Po-431 Lower limb skeletal muscle supporter using elastic contraction for adult spinal deformity improves walking distance and gait posture*Hideyuki Arima, et al.*, Nx-CEC Hamamatsu Univ. School of Medicine...S1048

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- 3-Po-432 Post tetanic motor evoked potentials monitoring increases the success rate of neurophysiological monitoring such in cases with preoperative motor deficit*Takahiro Mui, et al.*, Dept. of Orthop. Surg., Nara Medical Univ...S1049
- 3-Po-433 Longitudinal changes in outcomes of Tc-MEP monitoring during extramedullary spinal cord tumor surgery*Hiroki Ushirozako, et al.*, Dept. of Orthop. Surg., Morimachi Public Hosp...S1049
- 3-Po-434 Fade phenomenon of transcranial and spinal cord stimulation motor evoked potentials used for intraoperative neurophysiological monitoring in thoracic spine surgery*Muneharu Ando, et al.*, Dept. of Orthop. Surg., Kansai Medical Univ...S1050
- 3-Po-435 Can anal plug predict postoperative bladder and bowel dysfunction during intramedullary tumor surgery?*Kenta Kurosu, et al.*, Dept. of Orthop. Surg., Hamamatsu Univ. School of Medicine...S1050
- 3-Po-436 Efforts to reduce intraoperative spinal cord monitoring false positives in intramedullary tumor surgery: Creation of monitoring flowchart*Kenta Kurosu, et al.*, Dept. of Orthop. Surg., Hamamatsu Univ. School of Medicine...S1051
- 3-Po-437 Evaluation of conus disorders due to thoracolumbar vertebral fracture using motor evoked potential with transcranial magnetic stimulation*Naosuke Kamei, et al.*, Dept. of Orthop. Surg., Graduate School of Biomedical and Health Sciences, Hiroshima Univ...S1051

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- 3-Po-438 Effect of ramp lesion repair with ACL reconstruction on knee instability and comparison of cure rates on MRI images*Hikaru Ishibashi, et al.*, Dept. of Orthop. Surg., Hirosaki Univ. Graduate School of Medicine...S1052

- 3-Po-439 Is it possible to predict the posterior instability of meniscal ramp lesions observed on MRI at knee flexed position?
 *Satoshi Nonaka, et al.*, Dept. of Orthop. Surg., JCHO Gunma Central Hosp.···S1052
- 3-Po-440 Posterior displacement of meniscocapsular ligament in ramp lesions on MRI at knee flexion is associated with anterior tibial subluxation
 *Hibiki Kakiage, et al.*, Dept. of Orthop. Surg., Gunma Univ. Graduate School of Medicine···S1053
- 3-Po-441 Relationship between lateral meniscal oblique radial tears and knee instability in anterior cruciate ligament injured knees *Shunya Tsuji, et al.*, Dept. of Orthop. Surg., Graduate School of Biomedical and Health Sciences, Hiroshima Univ.···S1053
- 3-Po-442 Association between anterior tibial subluxation and postoperative results of anterior cruciate ligament reconstruction
 *Shinya Yanagisawa, et al.*, Zenshukai Hosp. Gunma Sports Medicine Research Center···S1054
- 3-Po-443 Changes of anterior tibial subluxation and tibial tubercle-trochlear groove distance after anterior cruciate ligament injury
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- 3-Po-444 Comparison of soft tissue damage and postoperative pain in arthroscopic anterior cruciate ligament reconstruction with and without using a tourniquet
 *Masaki Nagashima, et al.*, Dept. of Orthop. Surg., International Univ. of Health and Welfare Mita Hosp.···S1055

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- 3-Po-445 Total hip arthroplasty improves fall risk in patients with hip osteoarthritis
 *Takamune Asamoto, et al.*, Dept. of Orthop./Rheumatology, Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine, Graduate School of Medicine, Nagoya Univ.···S1056
- 3-Po-446 Capsular ligament suture with a non-absorbable artificial ligament (Broad Band loop) controls external rotation in THA via direct anterior approach
 *Akio Kanda, et al.*, Dept. of Orthop. Surg., Juntendo Shizuoka Hosp.···S1056
- 3-Po-447 Dislocation prevention effect in direct superior approach for total hip arthroplasty (THA): Comparison with posterior approach
 *Takkan Morishima, et al.*, Dept. of Orthop. Surg., Aichi Medical Univ.···S1057
- 3-Po-448 Examination of blood transfusion risk antero-lateral supine THA in non-drained using tranexamic acid *Hirohisa Fujimaki, et al.*, Dept. of Orthop. Surg., Nihon Univ. Hosp.···S1057
- 3-Po-449 Considerations for complications and prevention when using the Fit & Fill stem
 *Takahiro Iwaki, et al.*, Dept. of Orthop. Surg., Tokyo Medical Univ. Hosp.···S1058
- 3-Po-450 Changes in cup angle following total hip arthroplasty in relation to sagittal spinal alignment alterations *Naoya Fujimaru, et al.*, Dept. of Orthop. Surg., Graduate School of Medical Sciences, Kanazawa Univ.···S1058
- 3-Po-451 Usefulness of D-dimer for the diagnosis of chronic prosthetic joint infection
 *Shine Tone, et al.*, Dept. of Musculoskeletal Surg., Dept. of Multimodality Therapy for Cancer, Mie Univ. Graduate School of Medicine···S1059

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- 3-Po-452 Inferior pole fracture of the patella on computed tomography is associated with postoperative patella baja in patients with patellar fracture
 *Fuminori Murase, et al.*, Dept. of Orthop. Surg., Tohno Kosei Hosp.···S1060

- 3-Po-453 Predictors of postoperative complications of tension band wiring techniques for patella fracture: A retrospective multicenter (TRON group) study
 *Hiroki Oyama, et al.*, Dept. of Orthop./Rheumatology,
 Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine,
 Graduate School of Medicine, Nagoya Univ.···S1060
- 3-Po-454 Does preoperative manual reduction (Omoto technique) affect surgical outcomes for calcaneal fractures?: A multicenter (TRON group) retrospective study
 *Hidetane Takahashi, et al.*, Dept. of Orthop./Rheumatology,
 Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine,
 Graduate School of Medicine, Nagoya Univ.···S1061
- 3-Po-455 Comparison of the outcomes of plating, screw fixation, and pinning in Sanders type II fractures: A multicenter (TRON) retrospective study
 *Mihoko Kato, et al.*, Dept. of Orthop./Rheumatology,
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 Graduate School of Medicine, Nagoya Univ.···S1061
- 3-Po-456 A comparative study between lateral approach and medial with lateral approach for intra-articular calcaneal fractures with displaced sustentaculum fragment
 *Naohiro Hio, et al.*, Foot and Ankle Surg. Center, East Maebashi Orthop. Hosp.···S1062
- 3-Po-457 Three-dimensional evaluation of hindfoot alignment in calcaneal fractures
 *Gaku Matsuzawa, et al.*, Dept. of Orthop. Surg., Iwaki City Medical Center···S1062

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Tumor: Follow-up

- 3-Po-458 Postoperative recovery period for soft-tissue sarcoma of the thigh with acute rehabilitation alone *Atsushi Tanaka, et al.*, Dept. of Orthop. Surg., Shinshu Univ.···S1063
- 3-Po-459 Serial changes in limb functional score after musculoskeletal tumor surgery
 *Toshihiko Nishisho, et al.*, Dept. of Orthop.,
 Institute of Biomedical Sciences, Tokushima Univ. Graduate School···S1063
- 3-Po-460 Bone and soft tissue sarcomas related with Li-Fraumeni syndrome
 *Yu Toda, et al.*, Dept. of Musculoskeletal Oncology and Rehabilitation,
 National Cancer Center Hosp.···S1064
- 3-Po-461 Outpatient clinic for hereditary bone and soft tissue tumors for patients at high risk of developing sarcoma
 *Eiji Nakata*, Dept. of Orthop. Surg., Science of Functional Recovery and Reconstruction,
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- 3-Po-462 Soft tissue sarcoma patient compliance in completing electronic patient-reported outcome during administration of anti-tumor agent: SOOS multi-institutional study
 *Shunichi Toki, et al.*, Dept. of Orthop.,
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- 3-Po-463 Monitoring fertility after treatment for high-grade sarcoma in adolescent and young male patients *Manabu Hoshi, et al.*, Dept. of Orthop. Surg., Osaka City General Hosp.···S1065

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Sports: Shoulder

- 3-Po-464 Evaluation of bilateral humeral retroversion angle of the high school baseball players
 *Shota Ike, et al.*, Dept. of Orthop. Surg.,
 Faculty of Medicine and Graduate School of Medicine, Hokkaido Univ.···S1066

- 3-Po-465 The amount of change in the first rib tilting in neutral and maximal external rotation of the shoulder during pitching
 ·Kengo Kirimura, et al., Dept. of Orthop. Surg., Jyuzen Memorial Hosp.··S1066
- 3-Po-466 Relationship between anterior translation of humeral head, and glenoid bone defect
 ·Masahito Yoshida, et al., Dept. of Musculoskeletal Sports Medicine,
 Research and Innovation, Nagoya City Univ., Graduate School of Medical Sciences··S1067
- 3-Po-467 The effect of pre-operation glenoid morphology and coracoid transfer position in arthroscopic Bankart & Bristow ·Ryosuke Kimura, et al., Dept. of Orthop. Surg., Asao General Hosp.··S1067
- 3-Po-468 Return-to-play results of baseball players after surgery for thoracic outlet syndrome with arthroscopically-assisted first rib resection ·Toru Takahashi, et al., Keiyu Orthop. Hosp.··S1068
- 3-Po-469 Prevalence of thoracic outlet syndrome in athletes who visited our clinic with shoulder and elbow pain as the chief complaint
 ·Yasuhiro Mitsui, et al., Hyakutake Orthop. & Sports Clinic··S1068

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Locomo: Spine		

- 3-Po-470 Assessing surgical outcomes in cervical spine disease patients using the 25-question geriatric locomotive function scale
 ·Hiroyuki Takeda, et al., Dept. of Spine and Spinal Cord Surg., Fujita Health Univ.··S1069
- 3-Po-471 Interaction between locomotive syndrome and frailty in lumbar spinal canal stenosis
 ·Sota Nagai, et al., Dept. of Orthop. Surg., Fujita Health Univ.··S1069
- 3-Po-472 Age and gender related variation in global spinal alignment, body composition, and the related physical performance in a healthy population
 ·Chiaki Sato, et al., Dept. of Orthop. Surg., Akita Rosai Hosp.··S1070
- 3-Po-473 Assessment of locomotive syndrome and physical function in lumbar spinal stenosis patients with diffuse idiopathic skeletal hyperostosis
 ·Takaki Shimizu, et al., Dept. of Orthop. Surg., Kanazawa Munic. Hosp.··S1070
- 3-Po-474 Influence of diffuse idiopathic skeletal hyperostosis in a community-living older adults on quality of life, and locomotive syndrome
 ·Kazuma Ohshima, et al., Dept. of Orthop. Surg., Konan Kosei Hosp.··S1071
- 3-Po-475 The low %VC is a postoperative poor improvement factor in lumbar spinal stenosis patients with stage 3 for locomotive syndrome
 ·Takahiro Mui, et al., Dept. of Orthop. Surg., Nara Medical Univ.··S1071
- 3-Po-476 Does surgery for lumbar spinal stenosis improve to the same stages for locomotive syndrome as the general elderly population?
 ·Takahiro Mui, et al., Dept. of Orthop. Surg., Nara Medical Univ.··S1072

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- 3-Po-477 An algorithm for using deep learning to identify extremely mild AIS patients and false positive cases in scoliosis screening ·Terufumi Kokabu, et al., Dept. of Orthop. Surg.,
 Faculty of Medicine and Graduate School of Medicine, Hokkaido Univ.··S1073
- 3-Po-478 Deep learning image reconstruction for CT of the spine
 ·Satoshi Nagatani, et al., Dept. of Orthop. Surg.,
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- 3-Po-479 Using artificial intelligence to diagnose spondylolysis
 ·Akito Yabu, et al., Dept. of Orthop. Surg., Eniwa Hosp.··S1074

- 3-Po-480 Conservative treatment outcome prediction model for proximal-type cervical spondylotic amyotrophy using machine learning
 *Yusuke Ichihara, et al.*, Dept. of Orthop. Surg., Yamaguchi Univ. Hosp.···S1074
- 3-Po-481 Extracting registry entry items from spinal surgery records using large-scale language models
 *Satoshi Maki, et al.*, Dept. of Orthop. Surg., Graduate School of Medicine, Chiba Univ.···S1075
- 3-Po-482 Development of a prognostic model for bladder and bowel dysfunction in traumatic spinal cord injury patients using machine learning
 ···· *Takaki Kitamura, et al.*, Dept. of Orthop. Surg., Graduate School of Medicine, Chiba Univ.···S1075
- 3-Po-483 Finite element analysis for mechanism of occasional ALL rupture with posterior correction procedure in corrective surgery for ASD using LLIF
 *Hiroki Takeda, et al.*, Dept. of Spine and Spinal Cord Surg., Fujita Health Univ.···S1076

16 : 10 ~ 16 : 45 Poster (Booth No.5, Marine Messe Fukuoka Hall B) Moderator H. Yoshida Perioperative complications: Spine

- 3-Po-484 Factors affecting deep vein thrombosis in the perioperative period of lumbar surgery
 *Takashi Imuro, et al.*, Dept. of Orthop. Surg., Atsugi City Hosp.···S1077
- 3-Po-485 Does continuation of antiplatelet medication affect the complication and surgical outcomes after minimally invasive lumbar posterior decompression surgery?
 *Yuta Sawada, et al.*, Dept. of Orthop. Surg.,
 Osaka Metropolitan Univ. Graduate School of Medicine···S1077
- 3-Po-486 Does intraoperative hypothermia increase intraoperative estimated blood loss in posterior spinal fusion surgery for adolescent idiopathic scoliosis patients?
 *Kensuke Shinohara, et al.*, Dept. of Orthop. Surg.,
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 Dentistry, and Pharmaceutical Sciences, Okayama Univ.···S1078
- 3-Po-487 Postoperative complications in anterior cervical surgery: Is there a higher incidence of dysphagia and respiratory complications with long-segment surgery?
 *Yuki Shiratani, et al.*, Dept. of Orthop. Surg., Graduate School of Medicine, Chiba Univ.···S1078
- 3-Po-488 From navigation to robotics: How has the screw accuracy rate for adult spinal deformity surgery changed?
 ···· *Takahiro Hideshima, et al.*, Dept. of Orthop. Surg., St. Marianna Univ. School of Medicine···S1079
- 3-Po-489 Significance of UIV anchor selection based on mechanical analysis in adult spinal deformity correction surgery: A T7-pelvis model study
 *Yuki Kinoshita, et al.*, Scoliosis Center, Dept. of Orthop. Surg., Osaka City General Hosp.···S1079
- 3-Po-490 Factors of screw deviation during use of a spinal surgery-assisted robot in 166 cases
 *Jun Ueno, et al.*, Dept. of Orthop. Surg., St. Marianna Univ. Hosp.···S1080

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- 3-Po-491 Canceled
- 3-Po-492 Minimal clinically important difference of gait and balance ability in patients underwent corrective long spinal fusion for adult spinal deformity
 *Masato Tanaka, et al.*, Dept. of Orthop. Surg., Okayama Rosai Hosp.···S1081
- 3-Po-493 Canceled
- 3-Po-494 Impact of a specialized outpatient clinic on bone metastasis and its burden on spine surgeons
 *Hiroyuki Tsuchie, et al.*, Dept. of Orthop. Surg., Akita Univ. Graduate School of Medicine···S1082
- 3-Po-495 Local recurrence rate after intra-lesional pediclectomy after total en bloc spondylectomy in primary spinal tumors
 *Permsak Paholpak, et al.*, Dept. of Orthop. Surg., MDKKU, KKU, Khon Kaen, Thailand···S1083

3-Po-496 A study of stenotic changes of celiac artery before and after adult spinal deformity surgery
 *Yasushi Iijima, et al.*, Dept. of Orthop. Surg., Seirei Sakura Citizen Hosp.···S1083

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Adolescent idiopathic scoliosis: AIS 3		

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 *Tomoto Suzuki, et al.*, Dept. of Orthop. Surg., Yamagata Univ.···S1084

3-Po-498 Usefulness of modified S-line for upper instrumented vertebra selection in adolescent idiopathic scoliosis Lenke type 1C and 2C curves
 *Hiroki Oba, et al.*, Dept. of Orthop. Surg., Shinshu Univ.···S1084

3-Po-499 The risk factors for postoperative proximal junctional kyphosis in patients with AIS Lenke type 1 and 2 *Tomohiro Banno, et al.*, Div. of Surg. Care Morimachi, Hamamatsu Univ. School of Medicine···S1085

3-Po-500 Comparative study of cervical spine alignment changes following surgery for adolescent idiopathic scoliosis in Lenke type 1, 2 and/or type 5
 *Kai Mizukami, et al.*, Dept. of Orthop. Surg., Graduate School of Medical Science, Univ. of Yamanashi···S1085

3-Po-501 Risk factors for postoperative shoulder imbalance in Lenke type 2 patients with scoliosis correction by vertebral coplanar alignment (VCA) technique
 *Arihisa Shimura, et al.*, Dept. of Orthop., Juntendo Univ.···S1086

3-Po-502 Longitudinal evaluation of uninstrumented lumbar intervertebral disc 10 years after posterior spinal fusion for adolescent idiopathic scoliosis using MRI
 *Satoshi Suzuki, et al.*, Dept. of Orthop. Surg., Keio Univ.···S1086

3-Po-503 In residual AIS patients who have thoracolumbar/lumbar curves, instability of the facet joints causes lateral translations, leading to decreased flexibility
 *Masaya Mizutani, et al.*, Dept. of Orthop. Surg., Seirei Sakura Citizen Hosp.···S1087

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3-Po-504 Blunt vertebral artery injuries associated with cervical spine fractures
 *Hiroyuki Katoh, et al.*, Dept. of Orthop. Surg., Surgical Science, Tokai Univ.···S1088

3-Po-505 Association between neutrophil to lymphocyte ratio and delirium in patients after spinal cord injury: A single-center, retrospective cohort study
 *Kosuke Nitta, et al.*, Dept. of Orthop. Surg., Hirosaki Univ. Graduate School of Medicine···S1088

3-Po-506 Is traumatic disc injury a risk for corrective loss after posterior fixation?
 *Yuhei Yahiro, et al.*, Dept. of Orthop. Surg., Kagoshima City Hosp.···S1089

3-Po-507 Ten-year outcomes of our treatment for acute thoracolumbar injuries
 *Takuya Morita, et al.*, Dept. of Orthop. Surg., Japanese Red Cross Kobe Hosp.···S1089

3-Po-508 Characteristics of upper thoracic cage fracture
 *Yoshihisa Sugimoto, et al.*, Dept. of Orthop. Surg., Kawasaki Medical School···S1090

3-Po-509 The treatment outcomes for elderly or super-elderly patients (aged 80 and above) with cervical spinal cord injuries
 *Shoki Ban, et al.*, Dept. of Orthop. Surg., Japanese Red Cross Kobe Hosp.···S1090

3-Po-510 ITB therapy for severe spasticity
 *Yasutaka Takagi, et al.*, Dept. of Orthop. Surg., Tonami General Hosp.···S1091

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- 3-Po-511 Factors leading to open revision surgery after trans-sacral canal plasty for lumbar spine disease
 *Daigo Arimura, et al.*, Dept. of Orthop. Surg., The Jikei Univ. School of Medicine...S1092
- 3-Po-512 Where is the location of the highest-radiation-exposure in the operating room using 3D C-arm?:
 Effect of patient obesity on occupational exposure
 *Nodoka Manabe, et al.*, East Maebashi Orthop. Hosp...S1092
- 3-Po-513 Safety and efficacy of tranexamic acid in spinal surgery: A systematic review and meta-analysis
 *Kento Yamanouchi, et al.*, Dept. of Orthop. Surg., International Univ. of Health and Welfare...S1093
- 3-Po-514 Evaluation of 144 pedicle screws placed using a spinal surgery-assisted robot
 *Satoshi Takada, et al.*, Dept. of Orthop. Surg., Dokkyo Medical Univ...S1093
- 3-Po-515 Screw insertion time, registration time, and radiation time for robot-assisted spine deformation
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- 3-Po-516 The accuracy and safety of screw insertion procedure with the screw guide template system:
 The outcome of over 1000 attempts
 *Shuichi Kaneyama*, Dept. of Spine Surg., Kashiwa Kousei General Hosp...S1094
- 3-Po-517 Accuracy verification of simulation for L5/S-level full endoscopic discectomy using 3D MRI/CT
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 *Daisuke Ukeba, et al.*, Dept. of Orthop. Surg.,
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- 3-Po-518 Evaluation of MRI in meniscus repair for the lateral discoid meniscus
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- 3-Po-519 Effect of the volume of resected discoid lateral meniscus on the contact stress of the
 tibiofemoral joint *Takuji Yokoe, et al.*, Div. of Orthop. Surg.,
 Dept. of Medicine of Sensory and Motor Organs, Faculty of Medicine, Univ. of Miyazaki...S1096
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- 3-Po-521 Analytical method for the association between meniscal extrusion and distribution pattern of
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 *Koji Iwasaki, et al.*, Dept. of Functional Reconstruction for the Knee Joint,
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- 3-Po-522 Analysis of the tibial tunnel coalition and clinical outcomes following anatomic double-bundle
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 *Kanto Nagai, et al.*, Dept. of Orthop. Surg., Kobe Univ. Graduate School of Medicine...S1098
- 3-Po-523 Multiple secondary stabilizer injuries increase rotational instability in ACL-injured knee
 *Jiro Kato, et al.*, Dept. of Orthop. Surg.,
 Nagoya City Univ., Graduate School of Medical Sciences...S1098
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 *Atsuo Nakamae, et al.*, Dept. of Orthop. Surg.,
 Graduate School of Biomedical and Health Sciences, Hiroshima Univ...S1099

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Moderator S. Aota

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- 3-Po-525 Safe range of femoral implant position in resurfacing hip arthroplasty: Virtual surgery for CAM and hip dysplasia *Takuro Ueno, et al.*, Dept. of Orthop. Surg., Graduate School of Medical Sciences, Kanazawa Univ.··S1100
- 3-Po-526 Changes in posterior pelvic inclination after TKA in THA preoperative planning: Comparison of KA and MA methods
··· *Hiroaki Murakami, et al.*, Dept. of Orthop. Surg., Hiroshima City Hiroshima Citizens Hosp.··S1100
- 3-Po-527 Comparison of 3D and radiographic measurements in leg length differences in total hip arthroplasty
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- 3-Po-528 Effect of preoperative spinal imbalance on mobility after total hip arthroplasty
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- 3-Po-529 Total hip arthroplasty influences spinopelvic motion among supine, standing, and sitting positions *Tomoyuki Ashizawa, et al.*, Dept. of Orthop. Surg., Graduate School of Medical Science, Univ. of Yamanashi··S1102
- 3-Po-530 Relationship between perceived and structural leg length discrepancies of patients with hip osteoarthritis dysplasia *Tsuguaki Hosoyama*, Dept. of Endoprosthetic Surg., Oita Univ.··S1102
- 3-Po-531 The impact of COVID-19 on the case of hip surgeries in Japan: An analysis with the national open data *Maho Tsuchiya, et al.*, Dept. of Orthop. Surg., Kitasato Univ.··S1103

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Moderator T. Ishii

Ankle & foot fracture

- 3-Po-532 Ankle medial fractures focusing on the deltoid ligament, considering the lateral view and CT image *Shinya Adachi, et al.*, Dept. of Orthop. Surg., Tokyo Metropolitan Hiroo Hosp.··S1104
- 3-Po-533 Impact of deltoid ligament injury on clinical outcomes in chronic lateral ankle ligament repair
··········· *Shingo Kawabata*, Dept. of Orthop. Surg., Graduate School of Biomedical and Health Sciences, Hiroshima Univ.··S1104
- 3-Po-534 Incidence and location of osteochondral lesion of the talus associated with ankle fractures evaluated by magnetic resonance imaging
··········· *Futoshi Morio, et al.*, Dept. of Orthop. Surg., Hyogo College of Medicine··S1105
- 3-Po-535 Influence of osteochondral lesion of the talus associated with ankle fractures on clinical outcome *Futoshi Morio, et al.*, Dept. of Orthop. Surg., Hyogo College of Medicine··S1105
- 3-Po-536 The comminution of the fibula fracture in the ankle fracture is associated with the presence of the open fractures
··········· *Tomooki Kurashige, et al.*, Trauma and Reconstruction Center, Teikyo Univ. Hosp.··S1106
- 3-Po-537 Evaluation of Hounsfield unit values on the subchondral bone of the talus
··········· *Masashi Nakamura, et al.*, Dept. of Orthop. Surg., Hyogo College of Medicine··S1106
- 3-Po-538 Extracorporeal shock wave therapy for painful nonunion of fracture of interphalangeal coalition
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Moderator J. Nishida

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- 3-Po-539 Outcome of pedicle flap for reconstruction after malignant chest wall around tumor resection
··········· *Kunihiro Asanuma, et al.*, Dept. of Musculoskeletal Surg., Dept. of Multimodality Therapy for Cancer, Mie Univ. Graduate School of Medicine··S1108

- 3-Po-540 Investigation of the pulmonary pneumothorax incidence in this hospital in the use of pazopanib for a cancer and the sarcoma
 *Taisuke Furuta, et al.*, Dept. of Orthop. Surg., Hiroshima Univ. Hosp.···S1108
- 3-Po-541 Effect of perioperative chemotherapy of malignant soft tissue tumors on bone density: Study using Hounsfield unit value *Chiomi Shirai, et al.*, Dept. of Orthop. Surg., Yamagata Univ.···S1109
- 3-Po-542 Risk factors associated with postoperative infection of wide resection for malignant soft tissue tumors occurring around hips
 *Junya Shimizu, et al.*, Dept. of Orthop. Surg., Sapporo Medical Univ.···S1109
- 3-Po-543 Impact of post-operative infection in malignant musculoskeletal tumor on lower limb function: Propensity score matching on the nationwide registry
 *Takeshi Morii, et al.*, Dept. of Orthop. Surg., Kyorin Univ.···S1110
- 3-Po-544 Risk factors for each wound complication in surgery of soft tissue sarcoma in adductor compartment *Koichi Okajima, et al.*, Dept. of Orthop. Surg.,
 The Univ. of Tokyo Hosp., The Univ. of Tokyo···S1110
- 3-Po-545 A new skin incision for pelvic musculoskeletal tumor surgery
 *Masanori Saito, et al.*, Dept. of Orthop. Oncol., Cancer Institute Hosp. of JFCR···S1111

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- 3-Po-546 Does pitch count affect elbow joint torque and finger pinch force in baseball pitchers?
 *Keisuke Tsukada, et al.*, Dept. of Orthop. Surg., Teikyo Univ.···S1112
- 3-Po-547 Prevalence of osteochondritis dissecans of growing tennis players: An elbow ultrasonography study *Shota Ike, et al.*, Dept. of Orthop. Surg.,
 Faculty of Medicine and Graduate School of Medicine, Hokkaido Univ.···S1112
- 3-Po-548 Change over time in school-age baseball elbow examinations received by high school baseball players "from 2018, 2020, and 2022 questionnaires"
 *Tomoya Sato, et al.*, Dept. of Orthop. Surg.,
 Faculty of Medicine and Graduate School of Medicine, Hokkaido Univ.···S1113
- 3-Po-549 Baseball elbow screening in Hokkaido: Comparison before and after COVID-19 pandemic
 *Yuki Matsui, et al.*, Dept. of Orthop. Surg., Kushiro Rousai Hosp.···S1113
- 3-Po-550 Relationship between the carrying angle, medial instability of the elbow, and general joint laxity in high school baseball pitchers
 *Koichiro Yanai, et al.*, Dept. of Orthop. Surg., Gunma Univ. Graduate School of Medicine···S1114
- 3-Po-551 Significance of ring-down artifact of humeroulnar joint evaluated by ultrasound sonography in examination for high school and junior baseball player
 *Ikuta Hayashi, et al.*, Tottori Univ. Hosp. Sports Medical Center···S1114

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- 3-Po-552 Whether poor cervical alignment affects center of gravity sway in middle-aged and older volunteers
 *Naoki Segi, et al.*, Dept. of Orthop./Rheumatology, Musculoskeletal and Cutaneous Surg.,
 Program in Integrated Medicine, Graduate School of Medicine, Nagoya Univ.···S1115
- 3-Po-553 Exercise habits reduce falling in elderly volunteers
 *Shiro Imagama, et al.*, Dept. of Orthop./Rheumatology,
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 Graduate School of Medicine, Nagoya Univ.···S1115

- 3-Po-554 Associations between physical function falls, and fear of falling among older adults participating in a community-based physical exercise program
 *Hiromitsu Toyoda, et al.*, Dept. of Orthop. Surg.,
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- 3-Po-555 Relationship between low back pain and paravertebral muscle elasticity in elderly residents
 *Hiroaki Kijima, et al.*, Dept. of Orthop. Surg., Akita Univ. Graduate School of Medicine...S1116
- 3-Po-556 The influence of mild hyperbaric oxygen environment on exercise tolerance: New exercise environment for elderly *Kazufumi Hisamoto, et al.*, Dept. of Orthop.,
 Graduate School of Medical Science, Kyoto Prefectural Univ. of Medicine...S1117
- 3-Po-557 Pre- and post-operative gait measurement of orthopaedic surgery patients using gait analysis sensors *Hideyuki Aoki, et al.*, Dept. of Orthop. Surg., Toho Univ. (Omori)...S1117
- 3-Po-558 Effects of locomotion training-based outpatient rehabilitation on the sagittal spinopelvic alignment in locomotive syndrome: A 2-year prospective cohort study
 *Takashi Yurube, et al.*, Dept. of Orthop. Surg., Kobe Univ. Graduate School of Medicine...S1118

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- 3-Po-559 Factors associated with intervertebral bridging ossifications following posterior fixation for spondylodiscitis *Toshiaki Maruyama, et al.*, Dept. of Orthop. Surg., Hiroshima Univ. Hosp....S1119
- 3-Po-560 Effect of preventing deep surgical site infections for total joint arthroplasty using antibiotic-loaded bone cement: Systematic review and meta-analysis
 *Katsufumi Uchiyama, et al.*, Dept. of Patient Safety, Kitasato Univ....S1119
- 3-Po-561 Delayed debridement affects prognosis in patients with purulent flexor tenosynovitis
 *Yuki Fujihara, et al.*, Dept. of Orthop. Surg., Nagoya Ekisaikai Hosp....S1120
- 3-Po-562 Causes of death in patients with necrotizing fasciitis
 *Rintaro Niki, et al.*, Dept. of Orthop. Surg., St. Marianna Univ. School of Medicine...S1120
- 3-Po-563 Outcome of implant retention for periprosthetic knee joint infection
 *Tadashi Kikuchi, et al.*, Dept. of Orthop. Surg., Bange Kosei General Hosp....S1121
- 3-Po-564 Effectiveness of Ilizarov external fixator to avoid amputation
 *Koji Nozaka, et al.*, Dept. of Orthop. Surg., Akita Univ. Graduate School of Medicine...S1121
- 3-Po-565 Finger-preserving treatment strategies for severe hand osteomyelitis: Antibiotic-containing cement placement and tissue reconstruction, two innovations
 *Hiroki Hachisuka, et al.*, Dept. of Orthop. Surg.; Akane- Kai Tsuchiya General Hosp....S1122

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- 3-Po-566 Surgical Apgar score and controlling nutritional status score can be predictors of major postoperative complications after spine surgery
 *Takahiro Sunami, et al.*, Dept. of Orthop. Surg., Univ. of Tsukuba...S1123
- 3-Po-567 The impact of severity of preoperative malnutrition on postoperative complications of spinal fusion in the elderly
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- 3-Po-568 Comparison of nutrition status, anemia, and postoperative complications in older women who have total hip arthroplasty
 *Katsuhiko Maezawa, et al.*, Dept. of Orthop. Surg., Juntendo Univ. Urayasu Hosp....S1124
- 3-Po-569 Relationship between preoperative nutritional status, postoperative Alb levels, and postoperative dietary intake and length of hospital stay in THA patients
 *Hiroki Saito, et al.*, Dept. of Orthop. Surg., Kitasato Univ....S1124

- 3-Po-570 Comparison between two types, classified by the locations, about acromial fractures following reverse shoulder arthroplasty *Naoya Kubota, et al.*, Dept. of Orthop. Surg., Osaka Metropolitan Univ. Graduate School of Medicine...S1125
- 3-Po-571 Investigation of 16 patellar fractures after 2878 primary total knee arthroplasty *Kidai Hiroshima, et al.*, Joint Arthroplasty Center, Naniwa Ikuno Hosp...S1125
- 3-Po-572 Characteristics and surgical results of open ankle fractures *Yoshimichi Onose, et al.*, Dept. of Orthop. Surg., St. Marianna Univ. School of Medicine...S1126

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- 3-Po-573 Pain evaluation a week after sacroiliac joint block is useful for diagnosis of sacroiliac joint dysfunction *Ryota Kimura, et al.*, Dept. of Orthop. Surg., Akita Univ. Graduate School of Medicine...S1127
- 3-Po-574 Prevalence of vertebral fracture among post-menopausal patients coming with backache and role of teriparatide in management in developing country *Muhammad Muzzammil*, Dept. of Orthop. Services Hosp., Karachi, Pakistan...S1127
- 3-Po-575 Enhanced recovery after surgery for spine surgery: Early experience of an Asian hospital *Winston Shang Rong Lim, et al.*, Dept. of Orthop. Surg., Singapore Gen Hosp., Singapore, Singapore...S1128
- 3-Po-576 The importance among the level of restoring lumbar lordosis, reciprocal change of the pelvic tilt, and the proximal junctional kyphosis *Ho-Joong Kim, et al.*, Dept. of Orthop. Surg., SNU Bundang Hosp., SNUCM, Seoul, Korea...S1128
- 3-Po-577 Improved clinical outcomes and radiological parameters at 1-year following minimally invasive transforaminal lumbar interbody fusion with biplanar expandable cages *David Shaoen Sim, et al.*, Singapore General Hosp., Singapore, Singapore...S1129
- 3-Po-578 Canceled
- 3-Po-579 Full-endoscopic midline foraminoplasty: An alternative method for treating lumbar foraminal stenosis *Saran Pairuchvej, et al.*, Queen Savang Vadhana Memorial Hosp., Chonburi, Thailand...S1130

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Adolescent idiopathic scoliosis: AIS 4 Moderator K. Fukuda

- 3-Po-580 CT-based evaluation of vertebral rotation by coplanar procedure for Lenke type 1 adolescent idiopathic scoliosis *Tatsuhiko Fujiwara, et al.*, Dept. of Musculoskeletal Surg., Dept. of Multimodality Therapy for Cancer, Mie Univ. Graduate School of Medicine...S1131
- 3-Po-581 T1 tilt is risk factor for postoperative poor clinical outcome in patients with AIS type 1 *Tomohiro Banno, et al.*, Div. of Surg. Care Morimachi, Hamamatsu Univ. School of Medicine...S1131
- 3-Po-582 Can preoperative stress radiographs predict spontaneous correction of the PT curve and shoulder balance after PSF for AIS Lenke type1? *Keitaro Minato, et al.*, Dept. of Orthop. Surg., Niigata Univ. Medical & Dental Hosp...S1132
- 3-Po-583 Which factor has a strong impact on LA tilt in patients with Lenke type 5 curve treated by anterior surgery? *Satoshi Inami, et al.*, Dept. of Orthop. Surg., Dokkyo Medical Univ...S1132
- 3-Po-584 Which alignment factors influence postoperative outcomes in Lenke type 5 anterior fixation? *Satoshi Takada, et al.*, Dept. of Orthop. Surg., Dokkyo Medical Univ...S1133
- 3-Po-585 Association of low back pain with surgical outcome of posterior spinal fusion for scoliosis in adolescent idiopathic scoliosis remnants *Daisuke Kuroguchi, et al.*, Dept. of Orthop. Surg., Shinshu Univ...S1133

- 3-Po-586 Disc degeneration in long-term postoperative patients with adolescent idiopathic scoliosis:
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.....*Tsutomu Akazawa, et al.*, Dept. of Orthop. Surg., St. Marianna Univ. School of Medicine...S1134

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- 3-Po-588 Atlantoaxial joint injury associated with axis fracture
.....*Yuya Kajiki, et al.*, Dept. of Orthop. Surg., Japanese Red Cross Kobe Hosp...S1135
- 3-Po-589 Effect of ultra-early surgery in patients over age 70 years with cervical spinal cord injury: A propensity-score matched analysis
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- 3-Po-590 Influence of anticoagulants on cervical spine injury
.....*Tomoyuki Takigawa, et al.*, Dept. of Orthop. Surg., Japanese Red Cross Kobe Hosp...S1136
- 3-Po-591 Association between JOACMEQ and anxiety and depression in chronic cervical spinal cord injury patients
.....*Isamu Sasaki, et al.*, Dept. of Orthop. Surg., Hirosaki Univ. Graduate School of Medicine...S1137
- 3-Po-592 Ossification of the anterior longitudinal ligament affects the severity of neurological deficits following spinal cord injury without radiological abnormality
.....*Atsushi Kimura, et al.*, Dept. of Orthop. Surg., Jichi Medical Univ...S1137
- 3-Po-593 Recovery process of muscle strength and ADL of cervical spinal cord injury individuals based on modified Frankel classification at discharge
.....*Yousuke Tanaka, et al.*, Dept. of Rehab., Hokkaido Spinal Cord Injury Center...S1138

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- 3-Po-595 Study of perioperative complications of less invasive spine surgery for patients aged 85 years or older
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.....*Shuichi Uchiyamada, et al.*, Dept. of Orthop. Surg., Nagoya City Univ. West Medical Center...S1140
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- 3-Po-598 Application of continuous local antibiotic perfusion for patients with surgical site infection after instrumented spinal surgery: A retrospective multicenter study
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- 3-Po-599 SSI incidence and changes over time in adult spinal deformity surgery
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- 3-Po-600 Characteristics of screw perforation and screw loosening in atlantoaxial transarticular fixation using a preoperative CT-based navigation system
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- 3-Po-602 Evaluation of the distribution of coronal plane alignment of the knee classification in Japan with arthritic and healthy knees *Gai Kobayashi, et al.*, Dept. of Musculoskeletal Surg., Dept. of Multimodality Therapy for Cancer, Mie Univ. Graduate School of Medicine ...S1143
- 3-Po-603 Relationship between coronal plane alignment of the knee classification and osteoporosis in patients with knee osteoarthritis *Hideto Doi, et al.*, Dept. of Orthop. Surg., Jyuzen Memorial Hosp. ...S1144
- 3-Po-604 Effect of limb alignment by CPAK classification to soft tissue balance and one-year postoperative clinical outcomes in kinematically aligned TKA *Mitsuhiro Nakamura, et al.*, Dept. of Orthop. Surg., Hiroshima Pref. Hosp. ...S1144
- 3-Po-605 Does patient specific phenotype based on coronal plane alignment of the knee classification affect patient-reported outcomes? *Toshiki Konishi, et al.*, Dept. of Orthop. Surg., Clinical Medicine, Graduate School of Medical Sciences, Kyushu Univ. ...S1145
- 3-Po-606 CPAK classification of robotic-arm assisted total knee arthroplasty with restricted functional alignment method compared with mechanical alignment method *Kento Gouchi, et al.*, Dept. of Orthop. Surg., Shin-yurigaoka General Hosp. ...S1145
- 3-Po-607 Pre- and post-operative differences in CPAK classification with robotic-assisted total knee arthroplasty do not affect post-operative gait ability *Kazuki Amemiya, et al.*, Ichinomiya Onsen Hosp., Adult Reconstruction Knee and Hip, Sports Medicine Center ...S1146

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- 3-Po-609 The relationship between pain and MRI findings in hip osteoarthritis due to developmental dysplasia of the hip *Junpei Dan, et al.*, Dept. of Orthop. Surg., Kochi Medical School, Kochi Univ. ...S1147
- 3-Po-610 Significance of ultrasound-guided injections for undiagnosed hip pain *Akari Hisada, et al.*, Dept. of Orthop. Surg., Noshiro Kousei Medical Center ...S1148
- 3-Po-611 The severity of dysplasia and osteoarthritis in DDH with pain related to the instability of the labrum *Naohito Rikuno, et al.*, Dept. of Orthop. Surg., Kindai Univ. Faculty of Medicine ...S1148
- 3-Po-612 Relationship between urinary incontinence symptoms and the properties of the obturator internus muscle in patients with osteoarthritis of the hip *Sayaka Fukutani, et al.*, Rehabilitation Center, Shimane Univ. Hosp. ...S1149
- 3-Po-613 Driving simulation for right total hip arthroplasty *Tadashi Tsukeoka, et al.*, Dept. of Orthop. Surg., Chiba Rehabilitation Center ...S1149
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- 3-Po-616 Integrated er changes the way orthopaedic surgeons work
*Kentaro Sato, et al.*, Dept. of Orthop. Surg., St. Marianna Univ. School of Medicine...S1151
- 3-Po-617 Characteristics of fractures injured by falling from stepladder
*Runa Hori, et al.*, Dept. of Orthop. Surg., Shizuoka City Shizuoka Hosp...S1152
- 3-Po-618 The treatment of the early operation for the purpose of pain control for the chest independent
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- 3-Po-619 Patient awareness survey using a questionnaire during hardware removal
*Go Sakai, et al.*, Dept. of Orthop. Surg., Komaki City Hosp...S1153
- 3-Po-620 Impact of the COVID-19 epidemic on trauma treatment in Japan
*Satomi Kurimoto, et al.*, EMCC, Yokohama City Univ. Medical Center...S1153
- 3-Po-621 New coronavirus disease pandemic affected walking ability in patients with femoral
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- 3-Po-622 Clinical and imaging features, post-biopsy courses of bone lesions of Langerhans
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- 3-Po-623 Relationship between identification of spinal lesions and myeloma diagnostic events in multiple
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*Yuichiro Hisada, et al.*, Dept. of Orthop. Surg., Kushiro General Hosp...S1155
- 3-Po-624 Clinical study of skeletal metastasis in designated cancer hospital
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- 3-Po-625 Assessment of prognostic value of red blood cell distribution width in the treatment of
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*Kunihiro Ikuta, et al.*, Dept. of Orthop. Surg., Nagoya Univ...S1156
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- 3-Po-627 Clinical outcome of malignant bone and soft tissue tumor around the shoulder girdle
*Michiro Susa, et al.*, Dept. of Orthop. Surg., National Defense Medical College...S1157
- 3-Po-628 Examination of clinical application of benign bone tumor resection using finite element method
*Takuya Fujimoto, et al.*, Dept. of Orthop. Surg., Hyogo Cancer Center...S1158

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*Daisuke Kinoshita, et al.*, Dept. of Orthop. Surg., Totsuka Kyouritsu Daini Hosp...S1159
- 3-Po-630 Ultrasound-based screening for asymptomatic incomplete fifth metatarsal stress fractures
 (Jones fractures) with a focus on prevention in high school footballers
*Ryosuke Nakajima, et al.*, Dept. of Orthop., Juntendo Univ...S1159
- 3-Po-631 Relationship between screw length, insertion position and clinical outcome in intramedullary
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- 3-Po-632 Is it acceptable to have a plantar gap after intramedullary screw fixation for Jones fractures?
*Hirofumi Katsutani, et al.*, Dept. of Orthop. Surg., Totsuka Kyouritsu Daini Hosp...S1160
- 3-Po-633 Does foot function affect pitching performance?
*Hideaki Nagamoto, et al.*, Grad. School of Sport Sciences, Waseda Univ...S1161
- 3-Po-634 Relationship between rearfoot alignment and dynamic postural stability after jump landing in male
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- 3-Po-635 The dynamic measurement of the first tarsometatarsal joint mobility during jump landing in young female ballet dancers *Honoka Ishihara, et al.*, Dept. of Sports Rehabilitation, Graduate School of Biomedical and Health Sciences, Hiroshima Univ. ...S1162

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- 3-Po-636 Dynamic evaluation of first carpometacarpal joint during index finger abduction exercise in osteoarthritic patients using ultrasonography and real-time MRI *Dai Ohishi, et al.*, Rehabilitation Center, Kochi Medical School Hosp. ...S1163
- 3-Po-637 Effectiveness of wrist block for early active motion: Comparison throughout postoperative course of patients with pyogenic flexor tenosynovitis *Takahiro Sato, et al.*, Dept. of Orthop. Surg., Akita Univ. Graduate School of Medicine ...S1163
- 3-Po-638 Effect of outpatient rehabilitation after manipulation under anesthesia for frozen shoulder *Yuki Yanagawa, et al.*, Rehabilitation Center, Kochi Medical School Hosp. ...S1164
- 3-Po-639 Analysis of coordinated joint movement of upper limb in daily activities using postural synergy analysis *Hiroshi Kurumadani, et al.*, Dept. of Analysis and Control of Upper Extremity Function, Graduate School of Biomedical and Health Science, Hiroshima Univ. ...S1164
- 3-Po-640 Usefulness of exercise facilitation method using cognitive behavioral therapy tools for chronic low back pain resistant to conservative treatment *Motohiro Kawasaki, et al.*, Pain Manag. Ctr., NHO Shikoku Medical Center for Children and Adults ...S1165
- 3-Po-641 Effectivity of the TUG test and accelerometer data in the diagnosis of early hip osteoarthritis *Shinji Tokunaga, et al.*, Dept. of Orthop. Surg., Iwate Medical Univ. ...S1165
- 3-Po-642 Asymmetry in lower limb kinematics and kinetics during walking in cases of bilateral developmental dysplasia of the hip *Masanosuke Mizutani, et al.*, Dept. of Biomechanics, Graduate School of Biomedical and Health Sciences, Hiroshima Univ. ...S1166

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- 3-Po-643 Auxiliary diagnostic tool for spinal infections: Features and considerations of alpha-defensin lateral flow test *Atsuhiko Yoshida, et al.*, Dept. of Orthop. Surg., St. Marianna Univ. School of Medicine ...S1167
- 3-Po-644 Evaluation of myeloperoxidase point-of-care test in rapid diagnosis of periprosthetic joint infection *Shinsuke Ikeda, et al.*, Dept. of Orthop. Surg., Kitasato Univ. ...S1167
- 3-Po-645 Investigation of risk factors in pyogenic spondylitis in which the causative organism cannot be identified *Yushi Sakamoto, et al.*, Dept. of Orthop. Surg., Hyogo Prefectural Amagasaki General Medical Center ...S1168
- 3-Po-646 Inflammatory markers using white complete blood count predict bacterium detection in shoulder arthroscopic surgery *Kazuya Uehara, et al.*, Dept. of Orthop. Surg., Yamaguchi Univ. Graduate School of Medicine ...S1168
- 3-Po-647 Evaluation of serum albumin and globulin in combination with C-reactive protein improves serum diagnostic accuracy for native vertebral osteomyelitis *Hideo Mitsui, et al.*, Dept. of Orthop. Surg., Yokohama City Univ. Medical Center ...S1169
- 3-Po-648 The risk factors of surgical site infections after hemiarthroplasty for displaced femoral neck fracture in elderly multicenter (TRON) retrospective study *Satoshi Sumi, et al.*, Dept. of Orthop./Rheumatology, Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine, Graduate School of Medicine, Nagoya Univ. ...S1169

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*Koji Nozaka, et al.*, Dept. of Orthop. Surg., Akita Univ. Graduate School of Medicine...S1170

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- 3-Po-650 Factors associated with pneumonia after orthopaedic surgery
*Maho Tsumoto, et al.*, Dept. of Orthop. Surg., Saga Univ...S1171
- 3-Po-651 Relationships between swallowing function and aspiration pneumonia of hip fracture patients
*Ikko Ohno, et al.*, Dept. of Rehabilitation Medicine, Sakai City Medical Center...S1171
- 3-Po-652 Effects of concomitant use of NSAIDs and PPIs on renal function after arthroplasty
*Takafumi Ohshima, et al.*, Dept. of Orthop. Surg., Hakodate Goryoukaku Hosp...S1172
- 3-Po-653 To what extent do nonsteroidal anti-inflammatory drugs adversely affect renal function?:
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*Tadashi Kikuchi, et al.*, Dept. of Orthop. Surg., Bange Kosei General Hosp...S1172
- 3-Po-654 Impact of the hospitalist system on inpatient mortality in orthopaedic wards of acute hospitals
*Sanshiro Inoue*, Dept. of Gen. Int. Med., Iizuka Hosp...S1173
- 3-Po-655 Comparison of postoperative outcomes among patients treated by male versus female surgeons: A systematic review and meta-analysis
*Natsumi Saka, et al.*, Dept. of Orthop. Surg., Teikyo Univ...S1173
- 3-Po-656 Examination of postoperative delirium after total knee arthroplasty
*Takenori Tomite, et al.*, Dept. of Orthop. Surg., Akita Red Cross Hosp...S1174

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- 3-Po-657 Designing deep learning and machine learning models for enhanced transforaminal lumbar interbody fusion surgical planning
*Anh Tuan Bui, et al.*, International Ph.D. Program in Medicine, College of Medicine, Taipei Medical Univ., Taipei, Taiwan...S1175
- 3-Po-658 Full-endoscopic retroperitoneal approach for the devastating spondylodiscitis with psoas abscess*Siravich Suwithayasiri, et al.*, Dept. of Orthop., Chulabhorn Hosp., Chulabhorn Royal Acad., Bangkok, Thailand...S1175
- 3-Po-659 Canceled
- 3-Po-660 Quantification of the safe zone of the first to third sacral segments for transiliac-transsacral screw fixation in sacra*Po-Hsiang Chen, et al.*, Dept. of Orthop. Surg., Kaohsiung Veterans General Hosp., Kaohsiung, Taiwan...S1176
- 3-Po-661 Indications for and outcomes of three unilateral biportal endoscopic approaches for decompression of degenerative lumbar spinal stenosis: A systematic review
*Anh Tuan Bui*, International Ph.D. Program in Medicine, Taipei Medical Univ., Taipei, Taiwan...S1177
- 3-Po-662 Role of laproscopic decompression in spinal tuberculosis abscess
*Sanjay Chaube, et al.*, Dept. of MIS, St. Jude's Hosp., Uttar Pradesh, India...S1177
- 3-Po-663 Functional outcome & analysis of factors affecting health-related quality of life in pelvic ring fractures: A cross-sectional study
*Sandeep K. Yadav, et al.*, Dept. of Orthop. AIIMS Jodhpur, India...S1178

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- 4-1-S57-1 Joint preserving regenerative therapy using rhFGF-2 gelatin hydrogel for avascular osteonecrosis
 *Yutaka Kuroda, et al.*, Dept. of Orthop. Surg., Graduate School of Medicine, Kyoto Univ. ...S1179
- 4-1-S57-2 Autologous concentrated bone marrow injection for idiopathic osteonecrosis of the femoral head *Yasuhiro Homma, et al.*, Dept. of Orthop., Juntendo Univ. ...S1179
- 4-1-S57-3 Long-term clinical results and improvements of curved intertrochanteric varus osteotomy for osteonecrosis of the femoral head
 *Satoshi Nagoya, et al.*, Dept. of Orthop. Surg., Kojinkai Memorial Hosp. ...S1180
- 4-1-S57-4 Long term results of transtrochanteric rotational osteotomy
 *Takuaki Yamamoto*, Dept. of Orthop. Surg., Fukuoka Univ. ...S1180
- 4-1-S57-5 Genome analysis of idiopathic osteonecrosis of the femoral head *Shiro Ikegawa*, RIKEN ...S1181

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- 4-1-EL4 Linking orthopaedics and the SDGs
 *Norichika Kanie*, Graduate School of Media and Governance, Keio Univ. ...S1182

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- 4-1-LS36 Concept of the latest drug treatment for osteoporosis *Satoshi Soen*, Soen Orthop. ...S1182

13 : 20 ~ 14 : 20 Instructional lecture 54 **Moderator M. Kajitani**

- 4-1-EL54 Ethically appropriate decision-making process in the clinical setting
 *Masako Minooka*, Japan Association for Clinical Ethics ...S1183

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Progress in musculoskeletal regenerative medicine through AMED projects:
Clinical research and physician-led clinical trials
Sponsored by Japan Agency for Medical Research and Development

- 4-2-JS4-1 The role of AMED in the practical application of regenerative medicine
 *Chihaya Imamura*, AMED ...S1184
- 4-2-JS4-2 Regenerative medicine for spinal cord injury using iPS cells
 *Masaya Nakamura, et al.*, Dept. of Orthop. Surg., Keio Univ. ...S1184
- 4-2-JS4-3 Trial for practical application of regenerative medicine for osteoarthritis of the knee using cell sheets *Masato Sato, et al.*, Dept. of Orthop. Surg., Surgical Science, Tokai Univ. ...S1185
- 4-2-JS4-4 Meniscus regeneration with synovial mesenchymal stem cells
 *Ichiro Sekiya, et al.*, Center for Stem Cell and Regenerative Medicine,
 Tokyo Medical and Dental Univ. ...S1185
- 4-2-JS4-5 Multi-center clinical trial: Transplantation of autologous CD34-positive cells for non-union fracture
 *Ryosuke Kuroda, et al.*, Dept. of Orthop. Surg., Kobe Univ. Graduate School of Medicine ...S1186

9 : 35 ~ 10 : 55 JOA Directors' Proposed Symposium 5 Moderators N. Oizumi, K. Yamauchi
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- 4-2-JS5-1 How women orthopaedic surgeon can be a leader?
*Emiko Horii*, Dept. of Orthop. Surg., Kansai Medical Univ. Hosp.··S1187
- 4-2-JS5-2 Women physicians' leadership education in Japan: What can we do now?
*Yoko Akamine*, Pediatric Critical Care Medicine, Osaka City General Hosp.··S1187
- 4-2-JS5-3 Development of female orthopaedic surgeons to become leaders
*Toshifumi Ozaki, et al.*, Dept. of Orthop. Surg.,
 Science of Functional Recovery and Reconstruction, Faculty of Medicine,
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- 4-2-JS5-4 Current status and challenges in the teaching of female orthopaedic surgeons by
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- 4-2-JS5-5 Leadership education for orthopaedic surgeons in the united states
*Satomi Nagamine, et al.*, Dept. of Orthop. Surg., Saga Univ.··S1189
- 4-2-JS5-6 Current status of women's leadership development in specialty societies
*Ryoko Uesato*, Dept. of Orthop. Surg.,
 Nanbu Medical Center and Children's Medical Center··S1189

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- 4-2-LS37 Improve the knee pain!!: Treatment strategies for knee osteoarthritis in Reiwa era
*Kengo Harato, et al.*, Dept. of Orthop. Surg., Keio Univ.··S1190

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- 4-2-EL55 Patellar dislocation: Diagnosis and its treatments
*Masataka Deie*, Hiroshima City Hiroshima Citizens Hosp.··S1190

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- 4-3-JS6-1 Bone metastasis imaging: Current status and challenges
*Manabu Arai*, Dept. of Radiology, Keio Univ.··S1191
- 4-3-JS6-2 Active surgical intervention for spinal metastases: Its transition and current status at
 our hospital*Shunsuke Hamada, et al.*, Dept. of Orthop. Surg., Aichi Cancer Center··S1191
- 4-3-JS6-3 What interventional radiology can do for bone metastases
*Yasunori Arai*, Dept. of Diag. Radio., National Cancer Center East Hosp.··S1192
- 4-3-JS6-4 Prevention of locomotive syndrome in cancer patients with bone metastasis
*Yusuke Shinoda*, Dept. of Rehabilitation Medicine, Saitama Medical Univ.··S1192
- 4-3-JS6-5 Multidisciplinary cooperation between hospitals and clinics for patients with bone metastases
 in the local community
*Takaaki Tanaka, et al.*, Dept. of Orthop. and Rehabilitation Medicine,
 Faculty of Medical Sciences, Univ. of Fukui··S1193

9 : 35 ~ 10 : 55 JOA Directors' Proposed Symposium 7 Moderators S. Tanaka, Y. Nakashima
The role of the orthopaedic surgeon in the treatment of
rheumatoid arthritis: Past, present, and future

- 4-3-JS7-1 Contribution of orthopaedicians in the basic research on the inflammatory pathogenesis of
rheumatoid arthritis*Hisakata Yamada*, Dept. of Clinical Immunology, Kyushu Univ.··S1194
- 4-3-JS7-2 Contributions of orthopedists in drug treatment for rheumatoid arthritis
.....*Nobunori Takahashi*, Dept. of Orthop. Surg., Aichi Medical Univ.··S1194
- 4-3-JS7-3 Osteoporosis control in rheumatoid arthritis
.....*Sakae Tanaka*, Orthop. Surg., Sensory and Motor System Medicine,
Surgical Sciences, Graduate School of Medicine, The Univ. of Tokyo··S1195
- 4-3-JS7-4 The role of orthopaedic surgery in the treatment of rheumatoid arthritis
.....*Keiichiro Nishida*, Locomotive Pain Center, Okayama Univ. Hosp.··S1195
- 4-3-JS7-5 Role in care and rehabilitation
.....*Hajime Ishikawa*, Dept. of Orthop. Surg., Niigata Rheumatic Center··S1196
- 4-3-JS7-6 Treatment of rheumatoid arthritis with long-term prognosis: The important mission of the
orthopaedic practitioner for early diagnosis and early treatment
.....*Shigeki Momohara*, Hakkeikai Incorporated Medical Institution /
Keio Univ. School of Medicine··S1196

11 : 50 ~ 13 : 00 Luncheon seminar 38 Moderator S. Tanaka

- 4-3-LS38 Current trends in rheumatoid arthritis treatment that general orthopaedic surgeons should be
aware of··*Kousuke Ebina*, Dept. of Orthop. Surg., Graduate School of Medicine, Osaka Univ.··S1197

13 : 15 ~ 14 : 15 Instructional lecture 56 Moderator M. Neo

- 4-3-EL56 Current status and problems in the treatment of cervical spine deformities in Japan
.....*Takachika Shimizu*, Gunma Spine Center··S1197

4th Day May 26 Room 4

8 : 00 ~ 9 : 20 Symposium 58 Moderators H. Tsumura, S. Tanaka
Diagnosis and treatment of knee osteoarthritis based on the guidelines

- 4-4-S58-1 Pharmacological treatment of knee osteoarthritis: JOA guideline 2023
.....*Masahiko Ikeuchi*, Dept. of Orthop. Surg., Kochi Medical School, Kochi Univ.··S1198
- 4-4-S58-2 The natural course, prognosis, and risk factors for knee osteoarthritis
.....*Noriko Yoshimura*, Dept. of Preventive Medicine for Locomotive Organ Disorders,
22nd Century Medical and Research Center, Graduate School of Medicine,
The Univ. of Tokyo··S1198
- 4-4-S58-3 Diagnostic imaging of knee osteoarthritis-current situation and future assignment
.....*Go Omori*, Dept. of Health and Sports, Niigata Univ., Health and Welfare··S1199
- 4-4-S58-4 Surgical treatment of knee osteoarthritis based on a clinical practice guidelines
.....*Yasuyuki Ishibashi*, Dept. of Orthop. Surg., Hirosaki Univ. Graduate School of Medicine··S1199
- 4-4-S58-5 The effectiveness of exercise therapy for knee osteoarthritis
.....*Hiroo Matsuse*, Kurume Univ. Rehabilitation Center··S1200

9 : 35 ~ 10 : 55 Symposium 59

Moderators K. Fujikawa, H. Yamashita

Various issues related to traffic accidents: Involvement of lawyers and other players

- 4-4-S59-1 Problems and solutions for cases involving patient lawyers in traffic accident treatment
.....*Katsumi Nakamura*, Nakamura Orthop. Clinic...S1201
- 4-4-S59-2 Issues surrounding road traffic accidents -Involvement of lawyers and others: Cases involving
lawyers on the side of non-life insurance companies
.....*Shinichi Mihira*, Dept. of Orthop. Surg., Mihira R Clinic...S1201
- 4-4-S59-3 Medical inquiry documents from lawyers, courts*Shinichi Wada*, Wada Orthop. Surg. Clin....S1202
- 4-4-S59-4 Traffic accident associated issues and recommendations for dealing with them from
consulting physicians for insurance company
.....*Hisashi Inoue*, Dept. of Orthop. Surg., Juntendo Univ. Nerima Hosp....S1202
- 4-4-S59-5 Problems surrounding traffic accidents correspondence with lawyers: From the standpoint of
a lawyer*Mamoru Hanari*, Hibiki Law Office...S1203

11 : 50 ~ 13 : 00 Luncheon seminar 39

Moderator Y. Niki

- 4-4-LS39 The pathology of knee OA as revealed by ultrasound, and the targeted approach of platelet-rich
plasma (PRP) treatment*Shinnosuke Hada*, Dept. of Orthop., Juntendo Univ....S1204

13 : 15 ~ 14 : 15 Instructional lecture 57

Moderator N. Iwakura

- 4-4-EL57 Ultrasonography in hand surgery: Tips and pitfalls to avoid missing lesions
.....*Yuko Nakashima, et al.*, Dept. of Orthop. Surg.,
Graduate School of Biomedical and Health Sciences, Hiroshima Univ....S1204

4th Day May 26 Room 5

8 : 00 ~ 9 : 00 Instructional lecture 58

Moderator K. Shimada

- 4-5-EL58 Elbow arthroscopy techniques and pitfalls
.....*Michiro Yamamoto, et al.*, Dept. of Hand Surg., Musculoskeletal and Cutaneous Surg.,
Program in Integrated Medicine, Graduate School of Medicine, Nagoya Univ....S1205

9 : 15 ~ 10 : 15 Free papers Osteoporosis: Spine

Moderators H. Ataka, M. Hongo

- 4-5-1 Neoadjuvant teriparatide therapy targeting the osteoporotic spine: Influence of previous
antiresorptive treatment from the perspective of bone histomorphometry
.....*Kimihiko Sawakami, et al.*, Dept. of Orthop. Surg., Tominaga-Kusano Hosp....S1206
- 4-5-2 Unchanged major medical adverse event rates amidst rising surgical interventions for osteoporotic
vertebral fractures, 2015-2021*Soichiro Masuda, et al.*, Dept. of Orthop. Surg., Kyoto Univ....S1206
- 4-5-3 Effects of orthotics on conservative treatment of osteoporotic vertebral fractures: Propensity score
matching test between orthotics and no orthotics groups
.....*Masayoshi Iwamae, et al.*, Dept. of Orthop. Surg.,
Osaka Metropolitan Univ. Graduate School of Medicine...S1207
- 4-5-4 Efficacy of anabolic agents on subsequent fracture, bone union, and vertebral collapse in patients
with conservative treatment for vertebral fracture
.....*Keishi Maruo, et al.*, Dept. of Orthop. Surg., Hyogo College of Medicine...S1207
- 4-5-5 Sarcopenia index is associated with psoas muscle volume in patients with fragility fractures
.....*Toshihiko Ito, et al.*, Dept. of Orthop. Surg., Nippon Medical School Musashikosugi Hosp....S1208

- 4-5-6 Epidemiological features of neurological deficit due to osteoporotic vertebral fractures:
A prospective multicenter study
.....*Haruo Kanno, et al.*, Dept. of Orthop. Surg., Tohoku Medical and Pharmaceutical Univ.··S1208

10 : 30 ~ 11 : 30 Instructional lecture 59 Moderator K. Ikari

- 4-5-EL59 Genome analysis of orthopaedic diseases*Shiro Ikegawa*, RIKEN··S1209

11 : 50 ~ 13 : 00 Luncheon seminar 40 Moderators T. Sawaguchi, N. Endo

- 4-5-LS40-1 When should bone attack prevention be begun?: Perspective from epidemiological data
.....*Hiroshi Hagino*, Dept. of Reh., Sanin Rosai Hosp.··S1210

- 4-5-LS40-2 Regional medical cooperation through Fracture Liaison Service starting with hip fractures
.....*Fumio Fukuda*, Dept. of Orthop. Surg., Kitakyushu General Hosp.··S1210

13 : 15 ~ 14 : 15 Instructional lecture 60 Moderator S. Horibe

- 4-5-EL60 Treatment of meniscus injuries to restore its functions
.....*Hideyuki Koga*, Dept. of Joint Surg. and Sports Medicine,
Graduate School of Medical and Dental Sciences, Tokyo Medical and Dental Univ.··S1211

4th Day May 26 Room 6

8 : 00 ~ 9 : 00 Instructional lecture 61 Moderator N. Miyakoshi

- 4-6-EL61 Involvement of CKD-MBD in the development of osteoporosis in elderly patients
.....*Masaaki Inaba*, Dept. of Internal Medicine, Ohno Memorial Hosp.··S1211

9 : 15 ~ 10 : 15 Instructional lecture 62 Moderator T. Aizawa

- 4-6-EL62 Complete review of cervical spondylotic myelopathy*Atsushi Seichi*, Mitsui Hosp.··S1212

**10 : 30 ~ 11 : 30 Free papers Moderators R. Takemasa, S. Fujibayashi
Thoracic & lumbar spine 1**

- 4-6-1 Prevalence of lumbar spondylolisthesis and its association with LBP, physical performance in the
general population: The 2nd ROAD study
.....*Satoshi Arita, et al.*, Dept. of Orthop. Surg., Wakayama Medical Univ.··S1213

- 4-6-2 Research on the risk of progression of spinal epidural lipomatosis: Longitudinal study using health
examination data
.....*Nozomu Ohtomo, et al.*, Dept. of Orthop. Surg., The Univ. of Tokyo Hosp., The Univ. of Tokyo··S1213

- 4-6-3 Radiographic and non-radiographic factors associated with the severity of adult spinal deformity:
A cross-sectional and longitudinal cohort study
.....*Junichi Tsumura, et al.*, Dept. of Orthop. Surg., Asahikawa Medical Univ.··S1214

- 4-6-4 Clinical outcomes and risk factors associated with spinal kyphotic deformity following osteoporotic
vertebral fracture*Hayato Oishi, et al.*, Harima Hosp.··S1214

- 4-6-5 Clinical significance and influence of intravertebral cleft on clinical outcomes in patients with
pseudarthrosis of osteoporotic vertebral fractures
.....*Masaru Hatano, et al.*, Dept. of Orthop. Surg., Daiwa Chuo Hosp.··S1215

- 4-6-6 Clinical comparison of unilateral biportal endoscopic laminotomy (UBEL) vs. full endoscopic
laminotomy (FEL)*Zenya Ito*, Dept. of Orthop. Surg., Aichi Spine Hosp.··S1215

11 : 50 ~ 13 : 00 Luncheon seminar 41

Moderator T. Miyamoto

- 4-6-LS41 Rheumatoid arthritis treatment with a view to maximizing patient satisfaction: Expected role of a JAK inhibitor baricitinib ··· *Nobunori Takahashi*, Dept. of Orthop. Surg., Aichi Medical Univ.···S1216

13 : 15 ~ 14 : 15 Instructional lecture 63

Moderator K. Ikari

- 4-6-EL63 Directions for multidisciplinary treatment of rheumatoid arthritis in the era of molecular targeted therapies ·········· *Shigeki Momohara*, Endowed Course for Advanced Therapy for Musculoskeletal Disorders, Keio Univ. School of Medicine / Hakkeikai Incorporated Medical Institution···S1216

4th Day May 26 Room 7

8 : 00 ~ 9 : 00 Free papers Thoracic & lumbar spine 2

Moderators H. Kanno, K. Maruo

- 4-7-1 Examining the correlation between lower extremity motor function and gait function through utilizing the foot tapping test for thoracic myelopathy ·········· *Mayuko Kuwata, et al.*, Dept. of Rehabilitation Medicine, Chiba Univ. Hosp.···S1217
- 4-7-2 The impact of diabetes mellitus on patient-reported outcomes of posterior decompression surgery for lumbar spinal canal stenosis ·········· *Tatsuya Yamamoto, et al.*, Spine Center, Japanese Red Cross Shizuoka Hosp.···S1217
- 4-7-3 Factors influencing patient satisfaction after decompression surgery for lumbar spinal stenosis ·········· *Junichi Yamada, et al.*, Dept. of Orthop. Surg., Matsusaka Municipal Hosp.···S1218
- 4-7-4 Risk factors for progressive spinal sagittal imbalance after lumbar surgery: A 3-year follow-up study ·········· *Satoshi Nagatani, et al.*, Dept. of Orthop. Surg., Graduate School of Medical Sciences, Kanazawa Univ.···S1218
- 4-7-5 Cost-effectiveness of condoliase treatment versus micro endoscopic discectomy: 1st report ·········· *Takuya Takahashi, et al.*, Dept. of Orthop. and Spinal Surg., Graduate School of Medical and Dental Sciences, Tokyo Medical and Dental Univ./ Dept. of Orthop. Surg., Saiseikai Kawaguchi General Hosp.···S1219
- 4-7-6 Clinical results of condoliase for lumbar disc herniation ·········· *Makoto Kobori, et al.*, Kobori Orthop. Clinic···S1219

9 : 15 ~ 10 : 15 Instructional lecture 64

Moderator T. Saito

- 4-7-EL64 Exercise therapy for spinal disorders in athletes ·········· *Koji Kaneoka*, Grad. School of Sport Sciences, Waseda Univ.···S1220

10 : 30 ~ 11 : 30 Free papers Hip: Alignment

Moderators N. Hirasawa, Y. Maeda

- 4-7-7 Comparison of pelvic movement during supine THA between anterolateral approach and direct anterior approach using traction table ·········· *Masahiro Hasegawa, et al.*, Dept. of Musculoskeletal Surg., Dept. of Multimodality Therapy for Cancer, Mie Univ. Graduate School of Medicine···S1221
- 4-7-8 Three-dimensional kinematic analysis during swinging motion of racket sports after total hip arthroplasty ·········· *Yuki Nakao, et al.*, Dept. of Orthop. Surg., Clinical Medicine, Graduate School of Medical Sciences, Kyushu Univ.···S1221
- 4-7-9 Evaluation of bony features associating with hip instability ·········· *Takeshi Shoji, et al.*, Dept. of Artificial Joints and Biomaterials, Graduate School of Biomedical and Health Sciences, Hiroshima Univ.···S1222

- 4-7-10 Characteristics of spinal alignment in patients with hip osteoarthritis with developmental dysplasia of the hip
*Hiroyuki Yamagata, et al.*, Dept. of Orthop. Surg., Graduate School of Medicine, Chiba Univ.···S1222
- 4-7-11 Compensatory sagittal pelvic motion during gait in hip with acetabular dysplasia using three-dimensional motion analysis*Shinichi Ueki, et al.*, Dept. of Orthop. Surg.,
 Graduate School of Biomedical and Health Sciences, Hiroshima Univ.···S1223
- 4-7-12 Development and analysis of a developmental dysplasia of the hip model considering the mechanical properties of the capsular ligament
*Hiroaki Kijima, et al.*, Dept. of Orthop. Surg., Akita Univ. Graduate School of Medicine···S1223

11 : 50 ~ 13 : 00	Luncheon seminar 42	Moderator Y. Kawaguchi
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- 4-7-LS42 Current topic of diagnosis and treatment for low back pain
*Seiji Ohtori*, Dept. of Orthop. Surg., Graduate School of Medicine, Chiba Univ.···S1224

13 : 15 ~ 14 : 15	Instructional lecture 65	Moderator H. Taneichi
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- 4-7-EL65 Ethical considerations and future perspectives in the implementation of CST
*Toshiaki Shichinohe*, Hokkaido Univ. Hosp., Gastroenterological Surg. II/CERIA-MT···S1224

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8 : 00 ~ 9 : 00	Instructional lecture 66	Moderator T. Nakamura
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- 4-8-EL66-1 Basic principles of CLAP: How to use 5D in various bone and joint infections
*Daisuke Himeno*, Dept. of Orthop. Surg.,
 Chiba Emergency and Psychiatric Medical Center···S1225
- 4-8-EL66-2 Efficacy and safety in continuous local antibiotics perfusion (CLAP) for fracture-related infections*Shunsuke Takahara, et al.*, Dept. of Orthop. Surg.,
 Hyogo Pref. Kakogawa Medical Center···S1225

9 : 15 ~ 10 : 15	Free papers Sports	Moderator T. Hashimoto, D. Araki
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- 4-8-1 Comparison of visibility in needle arthroscopy according to surgical experience
*Jumpei Inoue, et al.*, Dept. of Orthop. Surg.,
 Nagoya City Univ., Graduate School of Medical Sciences···S1226
- 4-8-2 Analyses of cervical disc degeneration, alignment and range of motion in American football players
*Morito Takano, et al.*, Dept. of Orthop. Surg., Kitasato Univ. Kitasato Institute Hosp.···S1226
- 4-8-3 Suture bridge technique with Mason-Allen is superior to conventional suture bridge technique in arthroscopic rotator cuff repair
*Yoshiaki Itoigawa, et al.*, Dept. of Orthop. Surg., Juntendo Univ. Urayasu Hosp.···S1227
- 4-8-4 Evaluation of pitching elbow stress-related factors using wearable sensor in elementary school pitchers*Tomoya Yoshikawa, et al.*, Dept. of Orthop. Surg., Meiwa Hosp.···S1227
- 4-8-5 Gender differences in the relationship between intrinsic foot muscles and toe grip strength and jump landing ability in adolescent athletes*Satoshi Arima, et al.*, Dept. of Sports Rehabilitation,
 Graduate School of Biomedical and Health Sciences, Hiroshima Univ.···S1228
- 4-8-6 Development of a new exercise load index using sweat lactate sensor
*Daisuke Nakashima, et al.*, Dept. of Orthop. Surg., Keio Univ.···S1228

10 : 30 ~ 11 : 30	Free papers RA 2	Moderators T. Matsubara, H. Miyahara
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- 4-8-7 Examination of preventing HBV reactivation in RA patients by orthopaedic surgeons in AORA registry*Rena Wakabayashi, et al.*, Dept. of Orthop. Surg., Koto Kosei Hosp.···S1229

- 4-8-8 Actual status of pneumocystis pneumonia in rheumatoid arthritis patients using Aichi Prefecture DPC data
*Ryo Sato, et al.*, Dept. of Orthop./Rheumatology, Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine, Graduate School of Medicine, Nagoya Univ.···S1229
- 4-8-9 Effect of medication on spike protein antibody titer after coronavirus vaccination for patients with rheumatoid arthritis ···*Shunya Tamura, et al.*, Dept. of Orthop. Surg., Shirahama Hamayu Hosp.···S1230
- 4-8-10 Whether low nutritional status increase the surgical site infection in RA patients?
*Kentaro Kuwabata, et al.*, Dept. of Orthop. Surg., Japanese Red Cross Kagoshima Hosp.···S1230
- 4-8-11 Assessment of diagnostic performance of SAPHO syndrome using diagnostic imaging data by a large-scale language model
*Yu Mori, et al.*, Dept. of Orthop. Surg., Tohoku Univ. Graduate School of Medicine···S1231
- 4-8-12 Has the diagnostic delay in ankylosing spondylitis shortened in recent years?: A comparison study before and after 2010*Takahiro Inoue, et al.*, Dept. of Orthop. Surg., Kyushu Univ. Hosp.···S1231

11 : 50 ~ 13 : 00 Luncheon seminar 43 Moderator N. Fujita

- 4-8-LS43 Treatment strategy of osteoporosis based on basic research, and the role of bone anabolic agents
*Naohisa Miyakoshi*, Dept. of Orthop. Surg., Akita Univ. Graduate School of Medicine···S1232

13 : 15 ~ 14 : 15 Instructional lecture 67 Moderator K. Goto

- 4-8-EL67 SPO (spherical periacetabular osteotomy): From conception to realization
*Toshihiko Hara*, Dept. of Orthop. Surg., Iizuka Hosp.···S1232

4th Day May 26 Room 9

8 : 00 ~ 9 : 00 Free papers Around knee osteotomy Moderators E. Kondo, K. Kumagai

- 4-9-1 Comparison of the clinical outcome between HTO with medial meniscus centralization and solely HTO by the propensity score matching method
*Kazushi Horita, et al.*, Dept. of Orthop. Surg., Sapporo Medical Univ.···S1233
- 4-9-2 Is HCWHTO useful surgical procedure for patellofemoral arthritis?: Examination of changes in patella-position and patellofemoral joint
*Moritaka Maruyama, et al.*, Dept. of Orthop. Surg., Iwate Medical Univ.···S1233
- 4-9-3 The investigation of usefulness additional screw like Sujikai for open-wedge distal tuberosity tibial osteotomy bone union ···*Naoshi Ikegawa, et al.*, Dept. of Orthop. Surg., Kashiwa Municipal Hosp.···S1234
- 4-9-4 Combined autologous chondrocyte implantation in cartilage defects of the knee e with high tibial osteotomy in patients with varus deformity*Kazuhiko Saeki, et al.*, Fukuoka Sanno Hosp./ Fukuoka International Univ. of Health and Welfare···S1234
- 4-9-5 Effect of hinge fractures for bone union and clinical outcomes following opening-wedge distal tibial tubercle osteotomy: A propensity score-matched study
*Shuhei Otsuki, et al.*, Dept. of Orthop. Surg., Osaka Medical and Pharmaceutical Univ.···S1235
- 4-9-6 Comparison of complications and mid-term clinical outcomes in 200 knees of iVHTO and MOWHTO performed according to the guidelines
*Koji Yabuuchi, et al.*, Dept. of Orthop. Surg., Yagi Orthop Hosp.···S1235

9 : 15 ~ 10 : 15 Instructional lecture 68 Moderator T. Murase

- 4-9-EL68 Wrist arthroscopy: From basic to advanced techniques
*Toshiyasu Nakamura*, Dept. of Orthop. Surg./Rheumatology, International Univ. of Health and Welfare Clinical Research Center for Medicine Sanno Hosp.···S1236

10 : 30 ~ 11 : 30	Instructional lecture 69	Moderator I. Sekiya
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4-9-EL69 Therapeutics of osteoarthritis using adipose-derived stem cells
*Taku Saito*, Orthop. Surg., Sensory and Motor System Medicine,
 Surgical Sciences, Graduate School of Medicine, The Univ. of Tokyo...S1236

11 : 50 ~ 13 : 00	Luncheon seminar 44	Moderator S. Momohara
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4-9-LS44 Methotrexate in rheumatoid arthritis*Yuko Kaneko*, Dept. of Internal Med. Keio Univ....S1237

4th Day May 26 Room 10

8 : 00 ~ 9 : 00	Free papers	Moderators T. Teramoto, H. Ikezawa
Lower limb fracture & infection		

- 4-10-1 Nitinol staple only fixation vs. antiglide plate fixation for Weber type B distal fibular fracture
*Kensei Yoshimoto, et al.*, Dept. of Orthop. Surg., Tokyo Women's Medical Univ. Hosp....S1238
- 4-10-2 Correction loss due to immediately weight-bearing and ADL investigation in Ilizarov external
 fixator of fragility ankle fractures in elderly patients
*Koji Nozaka, et al.*, Dept. of Orthop. Surg., Akita Univ. Graduate School of Medicine...S1238
- 4-10-3 The possibility of reducing medical expenses by devising the placement of plates for distal
 fibular fractures
*Tsuyoshi Amemiya, et al.*, Dept. of Orthop. Surg., Japanese Red Cross Shizuoka Hosp....S1239
- 4-10-4 Outcome of ligament reconstruction for Lisfranc joint dislocation fractures from the perspective
 of the foot arch: Comparing acute and chronic cases
*Shota Ichikawa, et al.*, Dept. of Orthop. Surg., St. Marianna Univ. School of Medicine...S1239
- 4-10-5 Pathophysiological study of longitudinal type Lisfranc joint injury using CT
*Kazuki Kisamori, et al.*, Dept. of Orthop. Surg., The Jikei Univ. School of Medicine...S1240
- 4-10-6 External validation of clinical prediction model for deep infection after open long-bone fractures:
 Multi-center prospective cohort study (DOT-J)
*Takahiro Inui, et al.*, Dept. of Orthop. Surg., Teikyo Univ....S1240

9 : 15 ~ 10 : 15	Instructional lecture 70	Moderator M. Kubota
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4-10-EL70 Tracing the evolution of rheumatoid foot surgery
*Hisateru Niki*, Dept. of Orthop. Surg., St. Marianna Univ. School of Medicine...S1241

10 : 30 ~ 11 : 30	Free papers TKA	Moderators H. Horiuchi, R. Gejo
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- 4-10-7 Comparison of clinical outcomes in kinematically aligned total knee arthroplasty between the
 varus knees and the valgus knees
*Shogo Nabeki, et al.*, Dept. of Orthop. Surg., Kushiro Red Cross Hosp....S1242
- 4-10-8 Effect of tightness of soft tissue balance on patient satisfaction after total knee arthroplasty
*Hideki Mizu-uchi, et al.*, Dept. of Orthop. Surg., Saiseikai Fukuoka General Hosp....S1242
- 4-10-9 Factors affecting the difference between postoperative aHKA and mHKA after anatomical
 alignment TKA
*Kento Harada, et al.*, Dept. of Orthop. Surg., Tohoku Univ. Graduate School of Medicine...S1243
- 4-10-10 Evaluation of the relationship between PCL qualitative evaluation by preoperative UTE T2
 mapping and postoperative sag view*Akinori Nekomoto, et al.*, Dept. of Orthop. Surg.,
 Graduate School of Biomedical and Health Sciences, Hiroshima Univ....S1243

- 4-10-11 A randomized, prospective, comparative study of cemented and cementless total knee arthroplasty using the persona trabecular metal tibial component
*Kohei Shibata, et al.*, Dept. of Orthop. Surg., Fujita Health Univ.··S1244
- 4-10-12 The influence of the patellofemoral pressure on the post-operative functional outcomes in the total knee arthroplasty
*Sanshiro Yasuma, et al.*, Dept. of Orthop. Surg., Nagoya City Univ. East Medical Center··S1244

4th Day May 26 Room 11

8 : 00 ~ 9 : 00 Free papers Tumor: Basic research Moderators T. Morii, M. Emori

- 4-11-1 Clinical significance of CT Hounsfield unit values in patients with metastatic spinal tumors from lung cancer*Hiroshi Taniwaki, et al.*, Dept. of Orthop. Surg., Yodogawa Christian Hosp.··S1245
- 4-11-2 Development of a novel therapeutic predictive score on immune checkpoint inhibitors for non-small cell lung cancer with bone metastases*Yohei Asano, et al.*, Dept. of Orthop. Surg., Graduate School of Medical Sciences, Kanazawa Univ.··S1245
- 4-11-3 Primary spinal cord gliomas: Pathologic features associated with prognosis
*Yuki Tanaka, et al.*, Div. of Orthop. Surg., Dept. of Regenerative and Transplant Medicine, Niigata Univ. Graduate School of Medical and Dental Sciences··S1246
- 4-11-4 The significance of identification of fusion gene by cancer gene panel in sarcoma
 ...*Eiji Nakata, et al.*, Dept. of Orthop. Surg., Science of Functional Recovery and Reconstruction, Faculty of Medicine, Dentistry, and Pharmaceutical Sciences, Okayama Univ.··S1246
- 4-11-5 A novel treatment strategy targeting both sarcoma cells and tumor microenvironment in soft-tissue sarcoma*Ayana Kondo, et al.*, Dept. of Orthop. Surg., Science of Functional Recovery and Reconstruction, Faculty of Medicine, Dentistry, and Pharmaceutical Sciences, Okayama Univ.··S1247
- 4-11-6 Are MDM2-amplified soft tissue sarcoma without well-differentiated component and dedifferentiated liposarcoma the same disease entity?
*Tetsuya Sekita, et al.*, Dept. of Musculoskeletal Oncology and Rehabilitation, National Cancer Center Hosp.··S1247

10 : 30 ~ 11 : 30 Seminar for the physician teaching and managing the pediatric musculoskeletal disease Moderator M. Osaki

- Diagnosis and treatment for pediatric musculoskeletal disorders
*Hiroshi Kitoh*, Dept. of Orthop. Surg., Aichi Children's Health and Medical Center··S1248

4th Day May 26 Room 12

8 : 00 ~ 9 : 00 Instructional lecture 71 Moderator K. Takahashi

- 4-12-EL71 An encouragement to write English papers
*Keisuke Horiuchi*, Dept. of Orthop. Surg., National Defense Medical College··S1248

9 : 15 ~ 10 : 15 Instructional lecture 72 Moderator T. Kojima

- 4-12-EL72 Recent concept of patient safety: Safety-II and Safety-I
*Motonobu Hasegawa*, Dept. of Pediatr., Keio Univ.··S1249

10 : 30 ~ 11 : 30	Instructional lecture 73	Moderator N. Terada
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4-12-EL73 Infectious diseases and infection control: From the perspective of infectious disease doctors
*Masayoshi Shinjoh*, Dept. of Pediatr., and Infect. Dis. and Infect. Control, Keio Univ. Hosp.S1249

4th Day May 26 Poster

9 : 15 ~ 9 : 50	Poster (Booth No.1, Marine Messe Fukuoka Hall B)	Moderator K. Suzuki
Spinal metastasis		

- 4-Po-1 Association between intratumoral flow void and intraoperative blood loss in palliative surgery for metastatic spinal tumors*Yuji Ishino, et al.*, Dept. of Orthop. Surg., Graduate School of Medical Sciences, Kanazawa Univ.S1250
- 4-Po-2 Comparison of surgical outcomes in metastatic spine tumors according to the grade of the primary site*Hiroki Ohnishi, et al.*, Dept. of Orthop. Surg., Kobe Univ. Graduate School of MedicineS1250
- 4-Po-3 Early mortality factors within 3 months after spine surgery for malignant spinal cord compression syndrome due to spinal metastasis*Masaaki Paku, et al.*, Dept. of Orthop. Surg., Kansai Medical Univ. Hosp.S1251
- 4-Po-4 Relationships between surgical outcomes and frailty of metastatic spine tumors*Takeru Tsujimoto, et al.*, Dept. of Orthop. Surg., Kobe Univ.S1251
- 4-Po-5 Validation of decompression surgery alone for symptomatic metastatic spine tumors under 9 of spinal instability neoplastic score*Akira Iwata, et al.*, Dept. of Musculoskeletal Onc., NHO Hokkaido Cancer CenterS1252
- 4-Po-6 The effect of bone metastasis support on ambulatory function before and after the metastatic spine surgery*Kazuto Miura, et al.*, Dept. of Spine and Spinal Cord Surg., Nagaoka Red Cross Hosp.S1252
- 4-Po-7 Apparent and true decline in performance status in patients with spinal metastatic tumors with skeletal related events*Masataka Miura, et al.*, Dept. of Orthop. Surg., Graduate School of Medicine, Chiba Univ.S1253

9 : 15 ~ 9 : 50	Poster (Booth No.2, Marine Messe Fukuoka Hall B)	Moderator Y. Takazawa
Meniscus 1		

- 4-Po-8 Screening test for medial meniscus posterior root tear: Assessing maximal thickness of medial and lateral menisci*Makoto Suruga, et al.*, Dept. of Orthop. Surg., Nihon Univ. Hosp.S1254
- 4-Po-9 Can the femoral neck angle be a risk factor for MMPRT*Daiichirou Yokomizo, et al.*, Dept. of Orthop. Surg., Okayama Rosai Hosp.S1254
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- 4-Po-25 Factors of severity for dorsally angulated distal radius fracture
 *Kotaro Sato, et al.*, Dept. of Orthop. Surg., Iwate Medical Univ.···S1263
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- 4-Po-31 Arthroscopic treatment for the patients with hip synovial chondromatosis
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- 4-Po-38 Elucidation of factors associated with spinal ankylosing progression in patients with axial spondyloarthritis
.....*Takuya Izumiyama, et al.*, Dept. of Orthop. Surg.,
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- 4-Po-43 Clinical outcome of patients with Paget's disease of bone treated with bisphosphonate
.....*Michiro Susa, et al.*, Dept. of Orthop. Surg., National Defense Medical College···S1273
- 4-Po-44 Usefulness of bone-targeted enzyme replacement therapy in a patient with
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.....*Hiroaki Murata, et al.*, Dept. of Orthop. Surg., Matsushita Memorial Hosp.···S1274
- 4-Po-45 Necessity of serum vitamin D and zinc measurement in osteoporosis treatment
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- 4-Po-46 The effect of vitamin K deficiency on bone metabolism and bone mineral density in patients
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- 4-Po-48 Examination of appropriate sites for evaluation of osteoporosis in patients undergoing
knee arthroplasty*Mitsuhiko Kubo, et al.*, Dept. of Sports Med. and Musculoskelet. Sci.,
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.....*Takumi Kihara, et al.*, Dept. of Orthop. Surg., The Jikei Univ. School of Medicine···S1277
- 4-Po-51 Is Lisfranc joint osteoarthritis a symmetrical disease?: Analysis of bilateral degenerative
osteoarthritis of Lisfranc joint associated with hallux valgus
.....*Kenichiro Takeshima, et al.*, Dept. of Orthop. Surg., International Univ. of Health and Welfare···S1278
- 4-Po-52 Treatment and short clinical results of alumina ceramic prosthesis for hallux rigidus
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- 4-Po-53 The relationship between MTP joint instability of the lateral toes and toe sensory impairment
.....*Hiroyasu Mizuhara, et al.*, Dept. of Orthop. Surg.,
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- 4-Po-54 A modified combined tibialis anterior and posterior tendon transfer for paralytic equinovarus
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.....*Hiroshi Kaneko, et al.*, Dept. of Orthop. Surg., Aichi Children's Health and Medical Center···S1279
- 4-Po-55 Wide awake approach under ultrasonography for tendon disorders in foot region is useful for
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.....*Kenichi Mishima, et al.*, Dept. of Orthop./Rheumatology,
Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine,
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- 4-Po-57 Pathogenesis of recurrent solitary bone cyst
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- 4-Po-58 Treatment of leg length discrepancy and lower leg deformity with multiple cartilaginous
exostoses using eight-plate*Masaki Matsushita, et al.*, Dept. of Orthop./Rheumatology,
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- 4-Po-59 3D gait analysis of children with limb length discrepancy using gait profile score and gait
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- 4-Po-60 Guided growth for pediatric bowleg ···*Reiko Murakami*, Niigata Univ. Medical and Dental Hosp.···S1283
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- 4-Po-62 A study of steroid-induced osteonecrosis of the femoral head in children in our hospital
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.....*Hideki Kawamura, et al.*, Dept. of Infection Control and Prevention, Kagoshima Univ. Hosp.···S1285
- 4-Po-64 Prevention of surgical site infection using care bundles in spinal surgery
.....*Katsuhito Kiyasu, et al.*, Dept. of Orthop. Surg., Kochi Medical School, Kochi Univ.···S1285
- 4-Po-65 Surgical site infection care bundle in total hip/knee arthroplasty
.....*Kosuke Tsuda, et al.*, Dept. of Orthop. Surg., Sumitomo Hosp.···S1286
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.....*Akihito Oya, et al.*, Dept. of Orthop. Surg., Keio Univ.···S1286
- 4-Po-67 Infection rate after total knee arthroplasty significantly decreases with prevention bundle
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.....*Hiroaki Kijima, et al.*, Dept. of Orthop. Surg., Akita Univ. Graduate School of Medicine···S1287
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- 4-Po-71 Relationship between sarcopenia and locomotive syndrome in rheumatoid arthritis patients:
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Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine,
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- 4-Po-74 Three-dimensional fine structures in deep fascia revealed by combined use of cryofixed
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- 4-Po-75 New ultrasonic muscle imaging system that can visualize a wide range of quadriceps femoris
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- 4-Po-78 Surgical outcomes of spinal metastases in patients aged 80 years or older: A prospective cohort
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..... *Yutaro Kanda, et al.*, Dept. of Orthop. Surg., Kobe Univ. Graduate School of Medicine··S1293
- 4-Po-79 En bloc partial vertebrectomy for non-small cell lung cancer invading the spine
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- 4-Po-80 Analysis for differences among institution function in the surgical treatment for metastatic spinal
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- 4-Po-81 Surgical outcome of spine surgery for symptomatic spinal metastasis
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- 4-Po-85 Factors associated with the medial meniscus root tear in spontaneous knee osteonecrosis
*Hiroshi Koyama, et al.*, Dept. of Orthop. Surg., Jyuzen Memorial Hosp.···S1297
- 4-Po-86 The role of the medial meniscus in anterior knee stability
*Kousuke Shiwaku, et al.*, Dept. of Orthop. Surg., KKR Sapporo Medical Center···S1298
- 4-Po-87 Transtibial pullout repair for partial medial meniscus posterior root tears: Comparison with complete tears*Masanori Tamura, et al.*, Dept. of Orthop. Surg., Okayama Univ. Hosp.···S1298
- 4-Po-88 Relationship between osteophyte formation and medial meniscal extrusion in early-stage osteoarthritis of the knee*Naoki Takemoto, et al.*, Dept. of Orthop. Surg., Graduate School of Medical Sciences, Kanazawa Univ.···S1299
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*Takashi Shimoe, et al.*, Dept. of Orthop. Surg., Wakayama Medical Univ.···S1302
- 4-Po-94 Radiographic and blood sampling findings of symptomatic hand osteoarthritis
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- 4-Po-95 Three-dimensional analysis of thumb kinematics using 3DCT after first metacarpal osteotomy for thumb carpometacarpal osteoarthritis*Teruyasu Tanaka, et al.*, Dept. of Orthop. Surg., Graduate School of Biomedical and Health Sciences, Hiroshima Univ.···S1303
- 4-Po-96 The relationship between pain and MRI findings in the patients with thumb carpometacarpal joint osteoarthritis*Yasuhiro Yamamoto, et al.*, Dept. of Orthop. Surg., Juntendo Univ. Hosp.···S1303
- 4-Po-97 Long term results and complication of FINE ELBOW total elbow arthroplasty for rheumatoid arthritis patients in sixteen years follow-up
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- 4-Po-99 Inflammatory signs after distal radius fracture surgery are a poor outcome factor
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- 4-Po-103 Operative treatment of free bone graft for nonunion of the proximal scaphoid
 *Seietsu Senma, et al.*, Dept. of Orthop. Surg., Nakadori General Hosp.··S1307
- 4-Po-104 Comparison of conservative and surgical treatment for metacarpal neck fractures with volar displacement *Hikaru Saito, et al.*, Dept. of Orthop. Surg., Nakadori General Hosp.··S1308

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 Yokohama City Univ. Graduate School of Medicine··S1309
- 4-Po-106 Prognostic significance of immunological status in giant cell tumor of bone
 *Naoki Oike, et al.*, Div. of Orthop. Surg., Dept. of Regenerative and Transplant Medicine,
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- 4-Po-107 Clinicopathological assessment of PD-1/PD-L1 immune checkpoint expression via Th1 pathway in desmoid tumors
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- 4-Po-110 Spontaneous lung metastatic osteosarcoma cells gain malignancy and both epithelial and mesenchymal markers *Yusuke Aoki, et al.*, Dept. of Orthop. Surg., Univ. of the Ryukyus··S1311
- 4-Po-111 Antitumor effect and neurotoxicity of ethanol adjuvant therapy after surgery for a soft tissue sarcoma *Yoshitaka Ban, et al.*, Dept. of Orthop. Surg.,
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 *Satoshi Yamaguchi, et al.*, Graduate School of Global and Transdisciplinary Studies,
 Chiba Univ.··S1313
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 *Takaaki Nagase, et al.*, Dept. of Orthop. Surg., Yamagata Univ. Hosp.··S1314

- 4-Po-115 Analysis of the duration of withdrawal and factors affecting reinjury of thigh muscle contusion in professional soccer players *Takafumi Mizuno, et al.*, Dept. of Orthop./Rheumatology, Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine, Graduate School of Medicine, Nagoya Univ.··S1314
- 4-Po-116 Diagnostic value of ultrasound imaging for the tibial stress fractures *Yusuke Hirahata, et al.*, Teikyo Univ. Institute of Sports Sciences & Medicine··S1315
- 4-Po-117 Comparison of balance ability and foot muscle activity between life savers and healthy adults *Kai Suzuki, et al.*, Dept. of Orthop. Surg., St. Marianna Univ. School of Medicine··S1315
- 4-Po-118 Male elite soccer players have a higher incidence of accessory ossicles in the foot and ankle *Yuichi Akizuki, et al.*, Dept. Orthop. Surg., Osaka Saiseikai Nakatsu Hosp.··S1316

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- 4-Po-120 Examination of DEXA and fracture risk revealed by intraoral evaluation: Efforts of the secondary fracture prevention team in care hospital *Saori Imura, et al.*, Dept. of Nursing, Japanese Red Cross Aichi Medical Center Nagoya Daini Hosp.··S1317
- 4-Po-121 Oral assessment in fracture liaison service *Yusuke Masumoto, et al.*, Dept. of Orthop. Surg., Soka Municipal Hosp.··S1318
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- 4-Po-123 The characteristics of bone mineral density by DXA in healthy women *Kazuteru Shiraishi, et al.*, Dept. of Orthop. Surg., Nagasaki Univ. Graduate School of Biomedical Sciences··S1319
- 4-Po-124 Characteristics of male patients with osteoporotic vertebral fractures: Background, bone density, and nutritional status *Tatsuya Yasuda, et al.*, Dept. of Orthop. Surg., Iwata City Hosp.··S1319
- 4-Po-125 Osteoporosis medications for the first time in over 90s with proximal femur fractures is not useful for secondary fracture prevention *Toshiya Shitahodo, et al.*, Dept. of Orthop. Surg., Shingu Municipal Medical Center··S1320

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- 4-Po-126 Associated factors in each of three tests to diagnose locomotive syndrome in preoperative cancer patients *Yoshimi Katayama, et al.*, Central Rehabilitation Service, Okayama Univ. Hosp.··S1321
- 4-Po-127 Locomotive syndrome: Preoperative prevalence and risk factors for gastrointestinal cancer *Kai Ushio, et al.*, Dept. of Rehab. Med., Hiroshima Univ. Hosp.··S1321
- 4-Po-128 Worsening of locomotive syndrome after cancer surgery is associated with decreased walking speed *Kenji Sato, et al.*, Dept. of Orthop. Surg., Teikyo Univ.··S1322
- 4-Po-129 Cancer patients may contract severe locomotive syndrome without sarcopenia *Masahiro Hirahata, et al.*, Dept. of Orthop. Surg., Teikyo Univ.··S1322
- 4-Po-130 Relationship between obesity and locomotive syndrome in osteoporotic patients *Yuichiro Okazaki, et al.*, Dept. of Orthop. Surg., Showa Univ.··S1323
- 4-Po-131 Factors associated with locomotive syndrome: An exploratory study *Tomohito Yoshihara, et al.*, Dept. of Orthop. Surg., Saga Univ Hosp.··S1323

- 4-Po-132 Relationship between loco characteristics and effect of multidisciplinary team medical intervention in obese patients with type 2 diabetes
*Takako Nagai, et al.*, Dept. of Rehabil. Med., Nihon Univ. Hosp.··S1324

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- 4-Po-133 AI-assisted diagnostic system for osteoporosis using the chest X-ray images
*Toru Moro, et al.*, Div. of Science for Joint Reconstruction,
 Graduate School of Medicine, The Univ. of Tokyo··S1325
- 4-Po-134 Novel visualization method of fracture site in diagnostic AI for hip fracture
*Yuichi Imoto, et al.*, Dept. of Orthop. Surg., Teikyo Univ.··S1325
- 4-Po-135 Median nerve tracking in US images of CTS patients using object detection AI
*Atsuyuki Inui, et al.*, Dept. of Orthop. Surg., Kobe Univ. Graduate School of Medicine··S1326
- 4-Po-136 Diagnosis of carpal tunnel syndrome in ultrasonography using machine learning:
 A novel approach for severity assessment
*Tomohiko Waki, et al.*, Dept. of Orthop. and Spinal Surg.,
 Graduate School of Medical and Dental Sciences, Tokyo Medical and Dental Univ.··S1326
- 4-Po-137 Development of an artificial intelligence to predict hip osteoarthritis by using radiographs of
 the hip*Ryo Hidaka, et al.*, Dept. of Orthop. Surg., Teikyo Univ.··S1327
- 4-Po-138 Automatic measurement of hallux valgus angle using the deep neural network
*Ryutaro Takeda, et al.*, Dept. of Orthop. Surg.,
 The Univ. of Tokyo Hosp., The Univ. of Tokyo··S1327
- 4-Po-139 AI-based estimation of limb muscle mass from pelvic X-ray images
*Ryosuke Nishimura*, Dept. of Bone and Joint Surg.,
 Ehime Univ. Graduate School of Medicine··S1328

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- 4-Po-140 Characteristics of CSI components on central sensitization in the elderly individuals:
 The Yakumo study*Ryotaro Oishi, et al.*, Dept. of Orthop./Rheumatology,
 Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine,
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- 4-Po-141 Clinical evaluation related to central sensitization after surgery for distal radius fractures
*Kiyohito Naito, et al.*, Dept. of Orthop., Juntendo Univ.··S1329
- 4-Po-142 Prevalence and risk factors for central sensitization related to shoulder osteoarthritis and
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- 4-Po-143 Comparison of outcome between quantitative sensory testing and central sensitization
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*Masashi Izumi, et al.*, Rehabilitation Center, Kochi Medical School Hosp.··S1330
- 4-Po-144 Reference intervals and sources of variation of pressure pain threshold for quantitative sensory
 testing in a Japanese population*Hidenori Suzuki, et al.*, Dept. of Orthop. Surg.,
 Yamaguchi Univ. Graduate School of Medicine··S1331
- 4-Po-145 Efficacy of the PainVision apparatus for assessment of axial neck pain after cervical
 laminoplasty: A prospective study
*Takeshi Inoue, et al.*, Dept. of Orthop. Surg., The Jikei Univ. Katsushika Medical Center··S1331
- 4-Po-146 Association between health literacy and quality of life in patients with musculoskeletal
 chronic pain*Kinshi Kato, et al.*, Dept. of Orthop. Surg., Fukushima Medical Univ.··S1332

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- 4-Po-148 Disaster medical response to the earthquake-affected district in the Republic of Turkey *Jiro Oba, et al.*, Dept. of Emergency & Critical Care Medicine, Nerima Hosp., Juntendo Univ...S1333
- 4-Po-149 The role of orthopaedic surgeon in Japan disaster relief medical team based on the experience of Turkey's earthquake 2023 *Kaoru Harada, et al.*, Dept. of Orthop. Surg., Seirei Mikatahara General Hosp...S1334
- 4-Po-150 Association between number of orthopaedic surgeries and spread of COVID-19 in a prefecture *Kanichiro Wada, et al.*, Dept. of Orthop. Surg., Hirosaki Univ. Graduate School of Medicine...S1334
- 4-Po-151 Impact of the COVID-19 pandemic on surgical volume and outcomes in spine surgery *Yasushi Oshima, et al.*, Dept. of Orthop. Surg., The Univ. of Tokyo Hosp., The Univ. of Tokyo...S1335
- 4-Po-152 Simulation for calculation of overtime addition for emergency surgery *Daisuke Koga*, Dept. of Orthop. Surg., Saitama Red Cross Hosp...S1335
- 4-Po-153 The influence of the COVID-19 pandemic on pain and quality of life in the elderly individuals: The Yakumo study *Ryotaro Oishi, et al.*, Dept. of Orthop./Rheumatology, Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine, Graduate School of Medicine, Nagoya Univ...S1336

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Spinal cord disease

Moderator T. Kobayashi

- 4-Po-154 Fibrin-glue coated collagen matrix is useful in preventing spinal fluid leakage after durotomy *Hiroyuki Tominaga, et al.*, Dept. of Orthop. Surg., Graduate School of Medical and Dental Sciences, Kagoshima Univ...S1337
- 4-Po-155 Diagnostic identification of intradural extramedullary spinal tumor on quantitative MRI *Toshio Nakamae, et al.*, Dept. of Orthop. Surg., Graduate School of Biomedical and Health Sciences, Hiroshima Univ...S1337
- 4-Po-156 Clinical results of malignant intramedullary tumors *Tomohiko Hasegawa, et al.*, Dept. of Geriatric Musculoskeletal Health, Hamamatsu Univ. School of Medicine...S1338
- 4-Po-157 Cerebrospinal fluid leakage with total circumferential spinal fluid retention and its pathogenetic relationship to superficial siderosis *Satoru Egawa, et al.*, Dept. of Orthop. Surg., Tokyo Medical and Dental Univ. Hosp...S1338
- 4-Po-158 Pathology of arachnoid web: A new classification according to the MRI findings *Yasushi Fujiwara, et al.*, Dept. of Orthop. Surg., Hiroshima City North Medical Center Asa Citizens Hosp...S1339
- 4-Po-159 Imaging characteristics of syringomyelia associated with spinal cord hemangioblastoma: Relationship with surgical outcome *Osahiko Tsuji, et al.*, Dept. of Orthop. Surg., Keio Univ...S1339
- 4-Po-160 Clinical outcomes of recapping T-saw laminoplasty for thoracic spinal cord tumors *Masafumi Kawai, et al.*, Dept. of Orthop. Surg., Graduate School of Medical Sciences, Kanazawa Univ...S1340

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Moderator T. Nagura

Knee: Gait analysis

- 4-Po-161 The influence of surgical techniques of high tibial osteotomy on kinematics: Open wedge vs. closed wedge *Koji Iwasaki, et al.*, Dept. of Functional Reconstruction for the Knee Joint, Faculty of Medicine and Graduate School of Medicine, Hokkaido Univ. ...S1341
- 4-Po-162 Three-dimensional dynamic bone alignment analysis during gait in healthy women and athlete women *Keisuke Maeda, et al.*, Dept. of Orthop. Surg., Niigata Reha Hosp. ...S1341
- 4-Po-163 Possibility of knee adduction moment estimation during walking by six anatomical landmarks on video images *Kengo Ukishiro, et al.*, Dept. of Rehab., Hakodate Orthop. Clinic ...S1342
- 4-Po-164 Kinematic characteristics of early knee OA by gait analysis using inertial sensor units *Hiroaki Tsukamoto, et al.*, Dept. of Orthop. Surg., Noshiro Kousei Medical Center ...S1342
- 4-Po-165 Whole-body positron emission tomography of skeletal muscle metabolism during gait in symptomatic and asymptomatic patients with knee osteoarthritis *Yusuke Yanatori, et al.*, Dept. of Orthop. Surg., Graduate School of Medical Sciences, Kanazawa Univ. ...S1343
- 4-Po-166 Comparison of gait analysis before and after unilateral TKA surgery for knee osteoarthritis *Jun Fukui, et al.*, Dept. of Orthop./Rheumatology, Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine, Graduate School of Medicine, Nagoya Univ. ...S1343
- 4-Po-167 Dynamic evaluation of distal tibial osteotomy using hemicallotasis for medial osteoarthritis of the knee using three-dimensional gait analysis *Eiichi Nakamura, et al.*, Dept. of Orthop. Surg., Kumamoto Kaiseikai Hosp. ...S1344

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Moderator A. Sato

Hip: CAOS

- 4-Po-168 Accuracy of a commercially available augmented reality-based portable navigation for cup placement in the lateral decubitus position: Randomized, controlled study *Hiromasa Tanino, et al.*, Dept. of Orthop. Surg., Asahikawa Medical Univ. ...S1345
- 4-Po-169 Total hip arthroplasty with robot-assisted direct superol approach is accurate and precise in acetabular component positioning: A matched-pair analysis *Yumetaka Shinden, et al.*, Dept. of Orthop. Surg., Fukushima Medical Univ. ...S1345
- 4-Po-170 The accuracy of acetabular cup between fluoroscopy guidance and combined AR-based navigation system during ALS THA *Koji Murakami, et al.*, Dept. of Orthop. Surg., Fukuoka Orthop. Hosp. ...S1346
- 4-Po-171 Comparison of cup alignment between portable navigation and alignment guide in total hip arthroplasty *Tomonori Tetsunaga, et al.*, Dept. of Intelligent Orthop. System Development, Faculty of Medicine, Dentistry, and Pharmaceutical Sciences, Okayama Univ. ...S1346
- 4-Po-172 Accuracy of cup positioning of THA in supine position with rosa hip system and portable imageless navigation system *Arihiko Kanaji, et al.*, Dept. of Orthop. Surg., Fujita Health Univ. Bantane Hosp. ...S1347
- 4-Po-173 Effects of capsular ligament transection using portable navigation *Manabu Yamanaka, et al.*, Dept. of Orthop. Surg., Wakayama Medical Univ. ...S1347
- 4-Po-174 Accuracy of cup placement using AR CT-based navigation (HoloNavi One) and AR smartphone navigation (AR hip) *Masahiro Hasegawa, et al.*, Dept. of Musculoskeletal Surg., Dept. of Multimodality Therapy for Cancer, Mie Univ. Graduate School of Medicine ...S1348

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Moderator Y. Niizeki

Fingertip injury & flap

- 4-Po-175 Treatment outcomes and trend of proximal interphalangeal joint fractures in Akita Prefecture
.....*Manami Nakanishi, et al.*, Dept. of Orthop. Surg., Akita Univ. Graduate School of Medicine...S1349
- 4-Po-176 Fixation angle of distal interphalangeal joint in steel wire fixation with extension block pin
(Ishiguro Method) for bony mallet
.....*Keisuke Koizumi, et al.*, Dept. of Orthop. Surg., Aizawa Hosp...S1349
- 4-Po-177 Usefulness and pitfalls of micro screw fixation for Mallet finger fractures
.....*Makoto Ichikawa, et al.*, Dept. of Orthop. Surg., Hiroshima Kyoritsu Hosp...S1350
- 4-Po-178 Clinical comparison of the distal phalanx fracture of hand: Open reduction and internal fixation
vs. conservative treatment*Hiroki Yokoyama, et al.*, Dept. of Orthop. Surg., Chukyo Hosp...S1350
- 4-Po-179 Cosmetic evaluation of postoperative patient with flap surgery for fingertip injury
.....*Yuta Hayashi, et al.*, Dept. of Musculoskeletal Traumatology and Reconstructive Surg.,
Graduate School of Biomedical and Health Sciences, Hiroshima Univ...S1351
- 4-Po-180 Overcoming difficult venous anastomoses in free flaps using the microscopic parachute
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- 4-Po-181 The experience of the pedicled perforator flap and adiposal flap in upper extremities:
Analysis of case series for ten years
.....*Kiyohito Takamatsu, et al.*, Dept. of Orthop. Surg., Yodogawa Christian Hosp...S1352

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Moderator T. Manaka

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- 4-Po-182 Results of reverse shoulder arthroplasty to obtain external rotation function
.....*Kohei Uekama, et al.*, Dept. of Orthop. Surg.,
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- 4-Po-183 Clinical outcomes and disease characteristics focused on baseplate inclination after reverse
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.....*Eiko Hashimoto, et al.*, Dept. of Orthop. Surg., Graduate School of Medicine, Chiba Univ...S1353
- 4-Po-184 Accuracy of intraoperative navigation in total shoulder arthroplasty
.....*Hironori Kakoi, et al.*, Dept. of Orthop. Surg., Tenyoukai Central Hosp...S1354
- 4-Po-185 Investigating the efficacy of PSI and navigation system use for baseplate placement in RSA
.....*Hiroaki Kida, et al.*, Dept. of Orthop. Surg.,
Faculty of Medicine and Graduate School of Medicine, Hokkaido Univ...S1354
- 4-Po-186 Changes in teres minor muscle volume after reverse total shoulder arthroplasty and its impact
on clinical outcomes*Fumihide Terakawa, et al.*, Dept. of Orthop. Surg.,
Graduate School of Medicine, Chiba Univ...S1355
- 4-Po-187 Inlay vs. onlay in reverse shoulder arthroplasty
.....*Kazuki Yoshida, et al.*, Dept. of Orthop. Surg., Juntendo Univ. Urayasu Hosp...S1355
- 4-Po-188 5-year mid-term evaluation of clinical results and scapular notching after reverse
shoulder arthroplasty*Eriki Yanagi, et al.*, Dept. of Orthop. Surg., Kashibaseiki Hosp. Hosp...S1356

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Moderator A. Suzuki

Sports: Miscellaneous 2

- 4-Po-189 Examination of recurrent risk factors of elbow and shoulder injuries in throwing athletes using
T-view X-ray*Yusuke Sugimura, et al.*, Dept. of Orthop. Surg., Akita Rosai Hosp...S1357
- 4-Po-190 Reliability of the measurement of Hill-Sachs interval
.....*Jun Kawakami, et al.*, Dept. of Orthop. Surg., Tohoku Univ. Graduate School of Medicine...S1357

- 4-Po-191 Evaluation of elbow valgus stability in professional player: Examination of usefulness of ultrasonography compared with computed tomography
*Masahiro Miyano, et al.*, Dept. of Orthop. Surg.,
 Faculty of Medicine and Graduate School of Medicine, Hokkaido Univ.···S1358
- 4-Po-192 Outcomes of treatment for osteochondritis dissecans of the capitellum of the elbow in Tsugaru district, Aomori, Japan*Takahiro Tsushima, et al.*, Dept. of Orthop. Surg.,
 Hirosaki Univ. Graduate School of Medicine···S1358
- 4-Po-193 Bone morphological investigation for hook of hamate fractures in baseball players
*Ayumi Suzuki, et al.*, Dept. of Orthop. Surg., Seirei Hamamatsu General Hosp.···S1359
- 4-Po-194 Muscle elasticity and viscosity assessment using shear wave imaging: Effects of static stretching and relationship to joint mobility
*Taiki Kodesho, et al.*, Japan Institute of Sports Sciences···S1359
- 4-Po-195 Return to play of internal oblique muscle strain in professional baseball players
*Shuro Komatsu, et al.*, Kitasato Institute Hosp. Sports Medicine···S1360

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- 4-Po-196 Association between low bone mineral density and sarcopenia in women over 60 years old
*Ikuko Takahashi, et al.*, Dept. of Orthop. Surg., Ishii Orthop & Rehab Clinic···S1361
- 4-Po-197 Fall risk increases with fall anxiety due to decreased grip strength and shorter open-eyed, one-legged standing time
*Takashi Nagai, et al.*, Dept. of Rehabilitation Medicine, Showa Univ.···S1361
- 4-Po-198 Characteristics of patients with osteoporosis
*Hanako Nishimoto, et al.*, Dept. of Orthop. Surg., Kobe Univ. Graduate School of Medicine···S1362
- 4-Po-199 Changes in testing and treatment methods in orthopaedic surgeons' osteoporosis practice
*Takashi Nagai, et al.*, Dept. of Rehabilitation Medicine, Showa Univ.···S1362
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*Shun Shimodan, et al.*, Dept. of Orthop. Surg., Kushiro City General Hosp.···S1363
- 4-Po-201 Second fracture prevention for osteoporotic vertebral fracture through regional cooperation
*Atsushi Yoshioka, et al.*, Hachiya Orthop. Hosp.···S1363
- 4-Po-202 Report on the current status of calculation of secondary fracture prevention continuation management fee at our department
*Masayoshi Kanai, et al.*, Saitama Spine Center, Higashi-Saitama General Hosp.···S1364

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- 4-Po-203 Comparative study of loco degree test using AI image analysis method and conventional method
*Yukio Mikami, et al.*, Dept. of Rehabilitation Medicine, Hiroshima Univ. Hosp.···S1365
- 4-Po-204 Hand grip strength in middle-aged women: Approach to predict future falls
*Akiko Yamamoto, et al.*, Dept. of Orthop. and Spinal Surg.,
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- 4-Po-205 Prescription drug survey of elderly patients with extremity fractures
*Takumi Taniguchi, et al.*, Dept. of Orthop. Surg., Fujita Health Univ.···S1366
- 4-Po-206 Consistency of gardeners and doctors responses to the musculoskeletal examinations in children and adolescents
*Manato Horii, et al.*, Center for Advanced Joint Function and Reconstructive Spine Surg.,
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- 4-Po-207 The efficacy of stand-up test for assessment of locomotive syndrome in children
 *Yusuke Kido, et al.*, Dept. of Orthop. Surg., Wakayama Medical Univ.···S1367
- 4-Po-208 Evaluating the utility of locomotive syndrome assessment in children
 *Yusuke Kido, et al.*, Dept. of Orthop. Surg., Wakayama Medical Univ.···S1367
- 4-Po-209 A case of a multiple amputee who summited Mt. Fuji using a femoral prosthesis with an electronically controlled knee joint
 *Keisuke Ishii, et al.*, Dept. of Orthop. Surg., Teikyo Univ. Hosp.···S1368

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 *Yukinori Tsukuda, et al.*, Dept. of Orthop. Surg, Otaru General Hosp.···S1369
- 4-Po-211 Will the autonomous robot "aibo" contribute to postoperative rehabilitation of bone and soft tissue tumors? *Shin Ishihara, et al.*, National Cancer Center Hosp.···S1369
- 4-Po-212 Development of screening method for carpal tunnel syndrome using video analysis
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- 4-Po-213 Proximal femur bone mineral density estimated from chest X-ray using artificial intelligence related to short-term outcomes of unicompartmental knee arthroplasty
 *Ryota Yamagami, et al.*, Dept. of Orthop. Surg.,
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- 4-Po-214 Prediction of the fitting and size of stem using the models of algorithm and machine learning
 *Takehiro Kaneoka, et al.*, Dept. of Orthop. Surg.,
 Yamaguchi Univ. Graduate School of Medicine···S1371
- 4-Po-215 New challenges in the diagnosis and treatment of bone and soft tissue tumors using AI and digital transformation
 *Joe Hasei, et al.*, Dept. of Medical Information and Assistive Technology Development,
 Faculty of Medicine, Dentistry, and Pharmaceutical Sciences, Okayama Univ.···S1371
- 4-Po-216 Orthopaedic specialized knowledge obtained from language-generated AI (ChatGPT, Bard) is Inaccurate *Yasuhiko Takegami, et al.*, Dept. of Orthop./Rheumatology,
 Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine,
 Graduate School of Medicine, Nagoya Univ.···S1372
- 4-Po-217 AI posture analysis: Detecting osteoporosis from smartphone images
 *Takahisa Ogawa, et al.*, Dept. of Orthop. Surg., Saku General Hosp. Saku Medical Center···S1372

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- 4-Po-218 Examination of postoperative pain in cementless total hip arthroplasty
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- 4-Po-219 Difference of pre- and postoperative pain intensity between patients undergoing TKA and THA: A comparison using quantitative sensory testing
 *Shota Oda, et al.*, Rehabilitation Center, Kochi Medical School Hosp.···S1373
- 4-Po-220 Comparison of predisposing factors affecting anterior knee pain on walking and at rest in patients with knee osteoarthritis
 *Yoshinori Satake, et al.*, Dept. of Orthop. Surg., Kochi Medical School, Kochi Univ.···S1374
- 4-Po-221 Involvement of neuropathic pain and nociplastic pain in pain mechanism of knee osteoarthritis
 *Mitsuhiko Kubo, et al.*, Dept. of Sports Med. and Musculoskelet. Sci.,
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- 4-Po-222 Influence of pain catastrophizing in clinical results of open wedge distal tuberosity osteotomy
 *Genya Mitani*, Dept. of Orthop. Surg., Samukawa Hosp.··S1375
- 4-Po-223 Brain function of excitation-inhibition balance in patients with complex regional pain syndrome
 *Katsuyuki Iwatsuki, et al.*, Dept. of Hand Surg., Musculoskeletal and Cutaneous Surg.,
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- 4-Po-224 Gene expression profile in the dorsal horn in spinal cord injury after intravenous infusion of
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 *Ryunosuke Fukushi, et al.*, Dept. of Orthop. Surg., Sapporo Medical Univ.··S1376

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 *Sota Saeki, et al.*, Dept. of Hand Surg., Musculoskeletal and Cutaneous Surg.,
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- 4-Po-227 Neurolysis using 3D digital microscope in patients with peripheral nerve disorders
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- 4-Po-228 Clinical experience of ESWT(RPW) treatment in orthopaedic clinic
 *Kei Shimizu*, Dept. of Orthop., Prymecoast Minatomirai Clinic.··S1378
- 4-Po-229 Local mechanical properties of hamstring muscles: Using a Thiel soft-embalmed cadaver
 *Gakuto Nakao, et al.*, Graduate School of Health Sciences, Sapporo Medical Univ.··S1379
- 4-Po-230 Allogeneic tissues shipped from the Kitasato University Hospital bone bank used for upper
 extremity surgery *Takuya Tada, et al.*, Dept. of Orthop. Surg., Kitasato Univ.··S1379

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