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……*Shigekazu Komoto,* MHLW…S644

9：15～10：15 Special lecture 3 Moderator Y. Toyama

3-1-SL3 The impact of digital technology on health……*Jun Murai,* 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
……*Atsushi Seike,* 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
……*Hiroyuki Tsuchiya,* Dept. of Orthop. Surg., Yokohama Sakae Kyosai Hosp.…S646

3-1-LS24-2 Prevention of surgical site infections: Guidelines and iodine-coated implants
……*Toshiharu Shirai,* 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
……*Seiko Hashimoto,* 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
……*Yoshihiro Muragaki, et al.,* Center for Advanced Medical Engineering Research and Development (CAMED), Kobe Univ.…S647

15：55～17：15 Symposium 50 Moderators Y. Matsuyama, R. Kuroda
The future direction of scientific meetings

3-1-S50-1 Hosting JOSKAS-JOSSM 2022
……*Norimasa Iwasaki,* 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
……*Nobuo Adachi, et al.,* Dept. of Orthop. Surg., Graduate School of Biomedical and Health Sciences, Hiroshima Univ.…S648

3-1-S50-3 Report from Spine Week 2023
……*Manabu Ito,* 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 Sairyo,* 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

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

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

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

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

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
……*Hirotaka Suzuki,* Specialist Doctors Inc.…S682

16：15～17：15 Free papers ACL 2 Moderators M. Nozaki, S. Taketomi

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

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

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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
……*Hirotaka 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 spondylolysis: 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

12：00～13：10 Luncheon seminar 28 Moderator T. Miyamoto

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

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

16：15 ～ 17：15　Instructional lecture 46　Moderator　T. Kitamura

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

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

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

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

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

12：00～13：10 Luncheon seminar 29 Moderator M. Ikeuchi

13：25～14：25 Free papers Moderators M. Kameyama, R. Oda
Hand & elbow: Nerve & tendon

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

15：55～16：55 Invited lecture 19 Moderator Y. Mikami

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

3rd Day May 25 Room 7

8：00～9：00 Instructional lecture 48 Moderator H. Hoshino

12：00～13：10 Luncheon seminar 30 Moderator Y. Ishibashi

13：25～14：25 Free papers Knee: General 1 Moderators Y. Yamamoto, A. Kuwasawa

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

16：15～17：15 Free papers THA: Surgical result Moderators K. Nihei, M. Morita

17：30～18：30 Free papers Adult spinal deformity Moderators B. Otsuki, H. Moridaira

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

14：40～15：40 Free papers Moderators H. Konishi, T. Hikata
Spinal cord injury & ligamentous ossification

15：55～16：55 Free papers Spine & spinal cord tumor Moderators H. Uei, S. Kaneko

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

3rd Day May 25 Room 9

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

14：40～15：40 Afternoon seminar 3 Moderator T. Omodani

15：55～17：05 Free papers Clinical safety Moderators K. Sugimoto, T. Suzuki

17：30～18：30 Invited lecture 24 Moderator H. Murakami

3rd Day May 25 Room 10

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

3rd Day　May 25　Room 11

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?
……*Hirotaka 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……*Hirotaka 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-CFS2-6 New developments in biomechanics research using robotic systems for joint mechanical testing: Compressive loads applied to ligaments' entheses
……*Hiromichi 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 Cariovasc. 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

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

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

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

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

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

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

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

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

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

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

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

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 Munici. 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 tinting 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

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

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

9：45～10：20 Poster (Booth No.7, Marine Messe Fukuoka Hall A) Moderator T. Abe
Spinal alignment 1

9：45～10：20 Poster (Booth No.8, Marine Messe Fukuoka Hall A) Moderator K. Kanzaki
Adult spinal deformity 2

3-Po-97 Bone fusion process in circumferential MIS for adult spinal deformity
……*Koki Kawashima,* Dept. of Orthop. Surg., Kansai Medical Univ.…S858

3-Po-98 10 years progress of alignment changes and clinical results following corrective fusion surgery in patients with degenerative kyphosis or kyphoscoliosis
……*Yu Yamato, et al.,* Dept. of Orthop. Surg., Hamamatsu Univ. School of Medicine…S859

9：45～10：20 Poster (Booth No.9, Marine Messe Fukuoka Hall A) Moderator T. Yamazaki
Spinal osteoporosis 2

3-Po-99 Impact of preexisting care-dependency on functional decline following vertebral compression fractures: A retrospective cohort study using claims data
……*Akira Honda, et al.,* Dept. of Orthop. Surg., Gunma Univ. Graduate School of Medicine…S860

3-Po-100 Clinical characteristics and all-case mortality in elderly patients with vertebral compression fractures: A retrospective cohort study using claims data
……*Masaki Saito, et al.,* Dept. of Orthop. Surg., Gunma Univ. Graduate School of Medicine…S860

3-Po-101 Relationship between skin thickness and osteoporosis and spinal ligament ossification
……*Shun Umeki, et al.,* Dept. of Orthop. Surg., Saga Univ.…S861

3-Po-102 Characteristics of newly developed asymptomatic vertebral fractures: Relationship with nutritional status and spinal alignment
…*Yuichi Miyairi, et al.,* Dept. of Orthop./Rheumatology, Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine, Graduate School of Medicine, Nagoya Univ.…S861

3-Po-103 Are wall-occiput distance and rib-pelvis distance indicators of sagittal spinal alignment?
……*Koji Otani, et al.,* Dept. of Orthop. Surg., Fukushima Medical Univ.…S862

3-Po-104 Treatment satisfaction survey in patients treated with conservative therapy for osteoporotic vertebral fractures……*Yuto Kobayashi, et al.,* Dept. of Orthop. Surg., Osaka Metropolitan Univ. Graduate School of Medicine…S862

3-Po-105 Evaluation of the frequency of cement leakage from fenestrated pedicle screws
……*Toshihiro Hirose, et al.,* Spine & Spinal Cord Center, Kawasaki Municipal Hosp.…S863

9：45～10：20 Poster (Booth No.10, Marine Messe Fukuoka Hall A) Moderator H. Takagi
Around knee osteotomy 2

3-Po-106 Comparative study of postoperative clinical outcomes of open wedge distal tuberosity tibial osteotomy and open wedge high tibial osteotomy
……*Takuya Yamamura, et al.,* Dept. of Orthop., Juntendo Univ.…S864

3-Po-107 Distinctive postoperative trajectory of posterior tibial slope in ascending versus descending biplanar open-wedge high tibial osteotomy with early weight-bearing
……*Yukio Akasaki, et al.,* Dept. of Orthop. Surg., Kyushu Univ. Hosp.…S864

3-Po-108 Evaluation of bone union in distal tibial tuberosity arc osteotomy compared to conventional OWHTO
……*Hiroshi Nakamura, et al.,* Dept. of Orthop. Surg., Kikugawa General Hosp.…S865

3-Po-109 Decreased tibial posterior slope is associated with improved knee extension in hybrid lateral closed wedge high tibial osteotomy
……*Aritoshi Yoshihara, et al.,* Dept. of Orthop. Surg., Tokyo Medical and Dental Univ. Hosp.…S865

3-Po-110 Fibular osteotomy in the proximal neck region in interlocking wedge high tibial osteotomy using locking plate
……*Hirofumi Hanada, et al.,* Dept. of Orthop. Surg., Fukuoka Rehabilitation Hosp.…S866

3-Po-111 Opening wedge high tibial osteotomy for the cases of varus deformity in distal arge correction angle
……*Hirofumi Hanada, et al.,* Dept. of Orthop. Surg., Fukuoka Rehabilitation Hosp.…S866

9：45 ～ 10：20 Poster (Booth No.11, Marine Messe Fukuoka Hall A) Moderator N. Mashima
Hip: Alignment

9：45 ～ 10：20 Poster (Booth No.12, Marine Messe Fukuoka Hall A) Moderator H. Nonomiya
Atipical femoral fracture

9：45 ～ 10：20 Poster (Booth No.1, Marine Messe Fukuoka Hall B) Moderator A. Nimura
Subscapularis

3-Po-127 Relationship between size of subscapular tear and retroversion angle of humerus
……*Shuichi Moriya, et al.,* Dept. of Orthop. Surg., Juntendo Univ. Shizuoka Hosp.…S875

3-Po-128 Postoperative outcome of suture bride repair for Lafosse type 3 and type 4 tears of the subscapularis muscle…*Kengo Kirimura, et al.,* Dept. of Orthop. Surg., Jyuzen Memorial Hosp.…S876

3-Po-129 Arthroscopic on-lay tenodesis using low-profile anchor for the long head of the biceps tendon pathology……*Akira Sugi, et al.,* Dept. of Orthop. Surg., Sapporo Medical Univ.…S876

3-Po-130 MRI and functional evaluation after subscapularis repair in TSA
……*Ryuichi Yamashita, et al.,* Izumiotsu Municipal Hosp.…S877

3-Po-131 Clinical outcomes of reverse total shoulder arthroplasty with and without subscapularis repair
……*Takeshi Kokubu, et al.,* Dept. of Orthop. Surg., Kobe Medical Center…S877

3-Po-132 Positivity of anchor and suture cultures for cutibacterium acnes in patients undergoing reverse shoulder arthroplasty followed by rotator cuff repair
……*Takefumi Sakaguchi, et al.,* Dept. of Orthop./Rheumatology, Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine, Graduate School of Medicine, Nagoya Univ.…S878

9：45～10：20 Poster (Booth No.2, Marine Messe Fukuoka Hall B) Moderator K. Kumagai
Osteoporosis: Pharmacotherapy 1

3-Po-133 Real-world effects, safety and predictors of the effects of romosozumab treatment in primary and secondary osteoporosis patients
……*Kazuaki Mineta, et al.,* Dept. of Orthop. Surg., Tokushima Kensei Hosp.…S879

3-Po-134 Quantitative analysis of progress of the lower extremity artery disease following romosozumab treatment for osteoporosis in comparison with bisphosphonate treatment
……*Hiroshi Nomura, et al.,* Nomura Orthop. Clinic…S879

3-Po-135 Case series with significant decrease in bone mineral density during romosozumab treatment
……*Daichi Ota, et al.,* Dept. of Orthop. Surg., Yonezawa City Hosp.…S880

3-Po-136 Efficacy of romosozumab in postmenopausal women with untreated osteoporosis: What are the predictors of poor bone mass gain?
……*Masafumi Kashii, et al.,* Dept. of Orthop., Osaka Minami Medical Center…S880

3-Po-137 Romosozumab treatment for severe osteoporosis: Focusing on changes in BMD in the first six months and the last six months
……*Yuji Hirano, et al.,* Dept. of Rheumatol., Toyohashi Municipal Hosp.…S881

3-Po-138 Influence of physical function on the effectiveness of osteoporosis treatment: Study with romosozumab
……*Ayako Tominaga, et al.,* Dept. of Orthop. Surg., Tokyo Women's Medical Univ. Hosp.…S881

3-Po-139 The effect of fresh osteoporotic vertebral fractures on the degree of BMD increase with romosozumab administration in elderly
……*Ryo Fujita, et al.,* Dept. of Orthop. Surg., Hokkaido Spinal Cord Injury Center…S882

9：45～10：20 Poster (Booth No.3, Marine Messe Fukuoka Hall B) Moderator K. Takeshima
Foot 1

3-Po-140 Pre- and post-operative ADL of severe hallux valgus in the elderly: Comparison of MTP arthrodesis and joint-preserving corrective osteotomy
……*Kenta Saiga, et al.,* Dept. of Sports Medicine, Faculty of Medicine, Dentistry, and Pharmaceutical Sciences, Okayama Univ.…S883

3-Po-141 Short-term results after CMOS for extremely severe hallux valgus with lessor toes disorder and hallux valgus angle of 50° or more
……*Tomoko Karube, et al.,* Dept. of Orthop. Surg., St. Marianna Univ. School of Medicine…S883

9：45～10：20 Poster (Booth No.4, Marine Messe Fukuoka Hall B) Moderator N. Kamei
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9：45～10：20 Poster (Booth No.5, Marine Messe Fukuoka Hall B) Moderator N. Saka
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9：45～10：20 Poster (English) (Booth No.6, Marine Messe Fukuoka Hall B) Moderator Y. Harada
Hip joint

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3-Po-172 Anatomical parameters of pelvis based on the anterior pelvic plane are correlated with the standing sagittal parameters in healthy Japanese
……*Masayuki Ohashi, et al.,* Div. of Orthop. Surg., Dept. of Regenerative and Transplant Medicine, Niigata Univ. Graduate School of Medical and Dental Sciences…S901

3-Po-173 Relationship between trunk tilt and hip position during standing and walking in patients with kyphosis
……*Keisuke Ishikawa, et al.,* Dept. of Orthop. Surg., Tohoku Univ. Graduate School of Medicine…S901

3-Po-174 Assessment of spinopelvic mobility in total hip arthroplasty: Correlation of delta SS with whole spinal alignment……*Tomoto Suzuki, et al.,* Dept. of Orthop. Surg., Yamagata Univ.…S902

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3-Po-175 New insight of PJK pathophysiology in corrective adult spinal deformity surgery
……*Keiji Nagata,* Dept. of Orthop. Surg., Wakayama Medical Univ.…S903

3-Po-176 Effect of UIV pedicle screw insertion angle on prevention of PJK after surgical treatment for adult spinal deformity
……*Kazumasa Nakamura, et al.,* Dept. of Orthop. Surg., Toho Univ. (Omori)…S903

3-Po-177 Terminal rod contour is more important than Roussel classification in preventing PJK after adult spinal deformity surgery
……*Masayuki Ishihara, et al.,* Dept. of Orthop. Surg., Kansai Medical Univ.…S904

3-Po-178 Evaluation of bone structure in thoracic vertebra of upper adjacent vertebra after spinal deformity surgery…*Terumasa Ikeda,* Dept. of Orthop. Surg., Kindai Univ. Faculty of Medicine…S904

3-Po-179 Sex difference in adult spinal deformity: The effect of patient background to proximal junctional failure
……*Go Yoshida, et al.,* Dept. of Orthop. Surg., Hamamatsu Univ. School of Medicine…S905

3-Po-180 Clinical characteristics and risk factors for rod fracture in cMIS-multi rod for adult spinal deformity……*Masayuki Ishihara, et al.,* Dept. of Orthop. Surg., Kansai Medical Univ.…S905

3-Po-181 Characteristics of rod fracture patients at an average follow of more than 5 years after ASD surgery……*Ryo Shoji, et al.,* Orthop. Surg., Akita Kousei Medical Center…S906

10：30～11：05 Poster (Booth No.9, Marine Messe Fukuoka Hall A) Moderator T. Arizono
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3-Po-182 Are dental procedures associated with pyogenic vertebral osteomyelitis?
……*Soichiro Masuda, et al.,* Dept. of Orthop. Surg., Kyoto Univ.…S907

3-Po-183 Validity of combined posterior and anterior spinal fixation using a 3D-printed titanium cage for patients with lumbar pyogenic spondylitis
……*Taiki Yasukawa, et al.,* Dept. of Orthop. Surg., Showa Univ. Koto Toyosu Hosp.…S907

3-Po-184 Diagnosis of pyogenic spondylitis is delayed: A multicenter observational study
……*Tomoya Sato, et al.,* Dept. of Orthop. Surg., Faculty of Medicine and Graduate School of Medicine, Hokkaido Univ.…S908

3-Po-185 A study of screw insertion into infected vertebra in posterior fixation for pyogenic spondylitis
……*Hiroki Fukui, et al.,* Dept. of Orthop. Surg., Graduate School of Biomedical and Health Sciences, Hiroshima Univ.…S908

3-Po-186 Cervical spine lesions in ankylosing spondylitis from the T-ASK study
……*Ryo Sato, et al.,* Dept. of Orthop./Rheumatology, Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine, Graduate School of Medicine, Nagoya Univ.…S909

3-Po-187 Evaluation of mSASSS in ankylosing spondylitis (comparison of X-ray and CT) from the T-ASK study
……*Ryo Sato, et al.,* Dept. of Orthop./Rheumatology, Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine, Graduate School of Medicine, Nagoya Univ.…S909

3-Po-188 Structural damage to the sacroiliac joint in ankylosing spondylitis from T-ASK study
……*Junya Hasegawa, et al.,* Dept. of Orthop./Rheumatology, Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine, Graduate School of Medicine, Nagoya Univ.…S910

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3-Po-189 Changes in the stress distribution pattern of the patellofemoral joints after medial closing wedge distal femoral varus osteotomy……*Masanari Hamasaki, et al.,* Dept. of Orthop. Surg., Faculty of Medicine and Graduate School of Medicine, Hokkaido Univ.…S911

3-Po-190 Change in patellar height after high tibial osteotomy evaluated using three-dimensional computed tomography: Medial open-wedge……*Shinya Dobashi, et al.,* Dept. of Orthop. Surg., Faculty of Medicine and Graduate School of Medicine, Hokkaido Univ.…S911

3-Po-191 Effects of hybrid closed-wedge high tibial osteotomy on the patellofemoral joint
……*Tatsunori Iwai, et al.,* Dept. of Orthop. Surg., Toho Univ. (Sakura)…S912

3-Po-192 Qualitative evaluation of patellofemoral joint cartilage after medial open wedge high tibial osteotomy and hybrid closed wedge high tibial osteotomy
……*Shuji Nakagawa, et al.,* Dept. of Sports and Para-Sports Medicine, Graduate School of Medical Science, Kyoto Prefectural Univ. of Medicine…S912

3-Po-193 Changes in stress distribution in the sagittal plane of the knee joint before and after high tibial osteotomy……*Yuki Fujie, et al.,* Dept. of Orthop. Surg., Faculty of Medicine and Graduate School of Medicine, Hokkaido Univ.…S913

3-Po-194 Pre-operation alignment factors are associated with post-ankle alignment after medial opening wedge high tibial osteotomy in patients with knee osteoarthritis
……*Yuichiro Machiyama, et al.,* Dept. of Orthop., Juntendo Univ.…S913

3-Po-195 Change in plantar pressure pattern after around the knee osteotomy for medial knee osteoarthritis
……*Kyohei Nishida, et al.,* Dept. of Orthop. Surg., Kobe Univ. Graduate School of Medicine…S914

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Hip: Osteoporosis

3-Po-196 Total hip arthroplasty in patients with vertebral compression fracture
……*Yaichiro Okuzu, et al.,* Dept. of Orthop. Surg., Graduate School of Medicine, Kyoto Univ.…S915

3-Po-197 Assessment of canal flare index and proximal femoral bone density can improve stem selection for periprosthetic bone maintenance after THA
……*Shinya Hayashi, et al.,* Dept. of Orthop. Surg., Kobe Univ. Graduate School of Medicine…S915

3-Po-198 The quantitative assessment of the proximal femur and the bone changes after total hip arthroplasty using the taper-wedged stems
……*Yuichiro Shiromoto, et al.,* Dept. of Orthop. Surg., JCHO Saitama Medical Center…S916

3-Po-199 Study of differences in bone density within the femur
……*Anzu Nakamae, et al.,* Dept. of Orthop. Surg., Kochi Prefectural Aki General Hosp.…S916

3-Po-200 Effect of osteoporosis treatment intervention on postoperative outcomes of total hip arthroplasty
…*Ryuichi Kanabuchi, et al.,* Dept. of Orthop. Surg., Tohoku Univ. Graduate School of Medicine…S917

10：30 ～ 11：05 Poster (Booth No.12, Marine Messe Fukuoka Hall A) Moderator A. Funayama
Pelvic fracture

10：30 ～ 11：05 Poster (Booth No.1, Marine Messe Fukuoka Hall B) Moderator Y. Shibata
Irreparable rotator cuff tear

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3-Po-217 Locomotion training improves physical function, quality of life, and sarcopenia in patients with rheumatoid arthritis
……*Takeshi Mochizuki, et al.,* Dept. of Orthop. Surg., Kamagaya General Hosp.…S927

3-Po-218 Association between frailty and physical function in patients with rheumatoid arthritis from the fairy study……*Mochihito Suzuki, et al.,* Dept. of Orthop./Rheumatology, Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine, Graduate School of Medicine, Nagoya Univ.…S927

3-Po-219 Incidence and risk factors of falling in ambulatory patients with rheumatoid arthritis: A prospective study and comparison with the past
……*Naoki Nakagawa, et al.,* Dept. of Orthop. Surg., Tottori Univ.…S928

3-Po-220 Examination of diagnostic criteria for frailty: Decreased grip strength in patients with rheumatoid arthritis……*Yoshifumi Ohashi, et al.,* Dept. of Orthop./Rheumatology, Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine, Graduate School of Medicine, Nagoya Univ.…S928

3-Po-221 Relationship between locomotive syndrome and large joints symptoms in rheumatoid arthritis patients: T-FLAG study……*Yasumori Sobue, et al.,* Dept. of Orthop. Surg., Japanese Red Cross Aichi Medical Center Nagoya Daiichi Hosp.…S929

3-Po-222 Methotrexate use in rheumatoid arthritis patients is associated with overcoming locomotive syndrome……*Yasumori Sobue, et al.,* Dept. of Orthop. Surg., Japanese Red Cross Aichi Medical Center Nagoya Daiichi Hosp.…S929

3-Po-223 Assessment of bone fragility of knee in rheumatoid arthritis using dual-energy CT
……*Takahito Suto, et al.,* Dept. of Orthop. Surg., Gunma Univ. Graduate School of Medicine…S930

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Pediatric orthopaedics: Hip

3-Po-224 The relationships between questionnaire survey at the examination for developmental dysplasia of the hip and orthotic therapy in our hospital……*Takuya Ogawa, et al.,* Dept. of Orthop. Surg., Faculty of Medicine and Graduate School of Medicine, Hokkaido Univ.…S931

3-Po-225 Quality of life in adult patients with developmental dysplasia of the hip who were treated for hip dislocation during childhood……*Kenta Sawamura, et al.,* Dept. of Orthop./Rheumatology, Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine, Graduate School of Medicine, Nagoya Univ.…S931

3-Po-226 Outcome of the overhead traction for developmental hip dysplasia in our department
……*Hiroki Furuhashi,* Dept. of Orthop. Surg., Hamamatsu Univ. School of Medicine…S932

3-Po-227 Developmental dysplasia of the hip (DDH) high-risk children's incidence of DDH after walking initiation……*Yusuke Ohashi, et al.,* Dept. of Orthop. Surg., Faculty of Medicine and Graduate School of Medicine, Hokkaido Univ.…S932

3-Po-228 A study of cases requiring corrective surgery after treatment of Pavlik harness
……*Takuya Ogawa, et al.,* Dept. of Orthop. Surg., Faculty of Medicine and Graduate School of Medicine, Hokkaido Univ.…S933

3-Po-229 Slipped capital femoral epiphysis under 10 years old
……*Yuya Sato, et al.,* Dept. of Orthop. Surg., Nihon Univ.…S933

3-Po-230 A study of factors related to treatment outcomes of the riemenbüegel method for DDH IHDI classification grade 3
……*Kaori Sugiura, et al.,* Dept. of Orthop. Surg., Hamamatsu Univ. School of Medicine…S934

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Basic research: Biomechanics

3-Po-231 Biomechanical study of the acromial fracture after reverse total shoulder arthroplasty using a finite element model
……*Kenta Inagaki, et al.,* Dept. of Orthop. Surg., Graduate School of Medicine, Chiba Univ.…S935

3-Po-232 The stability of acromioclavicular joint regarding acromioclavicular ligament reconstruction method using cadaveric study
……*Fumiya Hattori, et al.,* Dept. of Orthop. Surg., Graduate School of Medicine, Chiba Univ.…S935

3-Po-233 Image analysis for improvement of elbow arthroscopy skills
……*Hiroaki Iwase, et al.,* Dept. of Hand Surg., Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine, Graduate School of Medicine, Nagoya Univ.…S936

3-Po-234 Comparison of tibial posterior slope angle by between tibial mechanical axis and five diaphyseal tibial axes after total knee arthroplasty
……*Yoshinori Ishii, et al.,* Dept. of Orthop. Surg., Ishii Orthop. & Rehab. Clinic…S936

3-Po-235 Effect of high tibial osteotomy on medial meniscus extrusion: A cadaveric biomechanical study
……*Kazushi Horita, et al.,* Dept. of Orthop. Surg., Sapporo Medical Univ.…S937

3-Po-236 Course variations of dorsalis pedis artery in fresh cadavers
……*Ichiro Tonogai, et al.,* Dept. of Orthop. Surg., Takamatsu Red Cross Hosp.…S937

3-Po-237 Usefulness of sonography for minimally invasive costal osteochondral autograft harvesting
……*Tetsuya Takenaga, et al.,* Dept. of Orthop. Surg., Nagoya City Univ., Graduate School of Medical Sciences…S938

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Pain: Evaluation, drug therapy & QOL

3-Po-238 Validity of pain evaluation by observation tools in hospitalized patients with osteoporotic vertebral fractures at our hospital in Kitakyushu……*Yohei Yoshimi, et al.,* Moji Medical Center…S939

3-Po-239 Toward the development of AI-based neuropathic pain screening
……*Satoshi Suzuki, et al.,* Dept. of Orthop. Surg., Nihon Univ.…S939

3-Po-240 Comparative prospective study of treatment for radicular leg pain and neuropathic pain due to lumbar spine: A preliminary report
……*Masaaki Machino, et al.,* Dept. of Orthop. and Spine Surg., Meijo Hosp.…S940

3-Po-241 The risk of triple whammy in orthopaedic outpatient
……*Shogo Tahata, et al.,* Dept. of Orthop. Surg., Naruo Hosp.…S940

3-Po-242 Association between neck pain and quality of life in inhabitants: Population-based study in mountain village……*Norihiko Takegami, et al.,* Dept. of Musculoskeletal Surg., Dept. of Multimodality Therapy for Cancer, Mie Univ. Graduate School of Medicine…S941

3-Po-243 Predictive factors of high-cost patients with acute whiplash-associated disorder in Japan
……*Kenji Miki, et al.,* Osaka Yukioka College of Health Science…S941

3-Po-244 Women-specific issues impact chronic pain
……*Tomoko Tetsunaga, et al.,* Dept. of Orthop. Surg., Okayama Univ. Hosp.…S942

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3-Po-245 Automatic clinical annotations enhance the diagnostic performance of end-to-end models: Explainable AI analysis on images for unstable hips in infants
……*Hirokazu Shimizu, et al.,* Dept. of Orthop. Surg., Faculty of Medicine and Graduate School of Medicine, Hokkaido Univ.…S943

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14：40 ～ 15：15　Poster (Booth No.9, Marine Messe Fukuoka Hall A)　Moderator　T. Tsuji
Spondylitis & ligamentous ossification

14：40～15：15　Poster (Booth No.10, Marine Messe Fukuoka Hall A)　Moderator　T. Yamashita
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3-Po-287 The fracture of extremity on chronic spinal cord injury
……*Yasuaki Tojo, et al.,* Dept. of Orthop. Surg., Hokkaido Spinal Cord Injury Center…S967

3-Po-288 Investigation of the association between frailty and complication development in spinal cord injury without radiographic abnormality……*Shinji Saito, et al.,* Dept. of Orthop. Surg., The Kashiwa Hosp. of the Jikei Univ. School of Medicine…S967

3-Po-289 Thoracolumbar spinal injury and associated multi-site trauma: A nationwide study of the Japan trauma data bank
……*Akimasa Yasuda, et al.,* Dept. of Orthop. Surg., National Defense Medical College…S968

3-Po-290 Post-transfer follow-up research of patients with traumatic cervical spinal cord injury
……*Masataka Ueda, et al.,* Dept. of Orthop. Surg., Science of Functional Recovery and Reconstruction, Faculty of Medicine, Dentistry, and Pharmaceutical Sciences, Okayama Univ.…S968

3-Po-291 The efficacy of posterior spinal fixation using SEPS/DEPS for vertebral fractures with diffuse idiopathic skeletal hyperostosis
……*Shuhei Ito, et al.,* Spine & Spinal Cord Center, Kawasaki Municipal Hosp.…S969

3-Po-292 Clinical outcome of hyperextension injuries of the thoracolumbar spine with diffuse idiopathic skeletal hyperostosis……*Takuya Iimura, et al.,* Dept. of Orthop. Surg., Kamitsuga Hosp.…S969

3-Po-293 Validity of the of score and clinical outcomes in conservative treatment of osteoporotic vertebral fractures
……*Kazuma Nagao, et al.,* Dept. of Orthop. Surg., Hyogo College of Medicine Hosp.…S970

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Glenohumeral instability

3-Po-294 The involvement of the middle and inferior glenohumeral ligaments in the anterior stability of the shoulder……*Tomoya Ono, et al.,* Dept. of Orthop. Surg., Mirai Kosei Hosp.…S971

3-Po-295 Frequency and characteristics of subcritical bone loss associated with anterior shoulder dislocation……*Tadahisa Takahashi, et al.,* Soma Central Hosp.…S971

3-Po-296 Comparison of the prevalence of Hill-Sachs injuries and bony Bankart lesions in shoulder dislocations and subluxations……*Kazuki Nomoto, et al.,* Hamamatsu Univ. Hosp.…S972

3-Po-297 Improvement of evaluating on-/off-track lesions using MR images
……*Rei Kimura, et al.,* Dept. of Orthop. Surg., Tohoku Univ. Graduate School of Medicine…S972

3-Po-298 Arthroscopic findings of traumatic first anterior shoulder dislocation and subluxation in boyhood: Comparison with adults
……*Kenji Okamura, et al.,* Dept. of Orthop. Surg., Hitsujigaoka Hosp.…S973

3-Po-299 Characteristics of modified Putti-Platt procedure for recurrent anterior shoulder instability
……*Norio Ishigaki, et al.,* Shoulder Medical Center, North Alps Medical Center Azumi Hosp.…S973

3-Po-300 Open Bankart & Bristow procedure for anterior shoulder instability: Radiological and arthroscopic findings and medium to long-term clinical outcomes
……*Kazunari Oshima, et al.,* Hitsujigaoka Hosp./Dept. of Orthop. Surg., Seirei Hamamatsu General Hosp.…S974

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3-Po-301 Results of three-year denosumab treatment in RA patients with bone erosion
……*Toshiharu Okuda,* Okuda Orthop. Clinic…S975

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Basic research: Knee

14：40～15：15 Poster (Booth No.5, Marine Messe Fukuoka Hall B) Moderator T. Okawa
Perioperative complications: Lower limb 1

14：40～15：15 Poster (English) (Booth No.6, Marine Messe Fukuoka Hall B) Moderator K. Yano
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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 for cervical ossification of the posterior longitudinal ligament
……*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 surgical outcome of spinal fracture
……*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 2 vertebrae and penetrating 5 cortex)……*Fumihiro Miyaguchi,* Imakiire General Hosp.…S1006

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3-Po-357 Under-correction was associated with residual proinflammatory gene expressions and poor clinical results after high tibial osteotomy
……*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 computed tomography
……*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 tibial osteotomy……*Shuya Ide,* Tsuruta Orthop. Clinic…S1010

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3-Po-364 Attempt to evaluate various aspects of total hip arthroplasty: Focusing on gait speed, locomo25, 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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Bone & soft tissue defects

3-Po-371 Tissue regenerative power of bone lengthening for the treatment of soft tissue and bone defects in severe lower extremity trauma
……*Koji Nozaka, et al.,* Dept. of Orthop. Surg., Akita Univ. Graduate School of Medicine…S1015

3-Po-372 Morphological changes of grafted bone in patients with tibial bone defects reconstructed with the induced membrane technique……*Gen Sasaki, et al.,* Dept. of Orthop. Surg., Teikyo Univ.…S1015

3-Po-373 Reconstruction for tissue defect in lower extremity with chain flap transfer
……*Rikuo Shinomiya, et al.,* Dept. of Musculoskeletal Traumatology and Reconstructive Surg., Graduate School of Biomedical and Health Sciences, Hiroshima Univ.…S1016

3-Po-374 Prophylactic administration of continuous local antibiotics perfusion for open fractures to prevent infections……*Akihiro Ohara, et al.,* Dept. of Orthop. Surg., Hyogo Prefectural Harima-Himeji General Medical Center…S1016

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

15：25 ～ 16：00　Poster (Booth No.1, Marine Messe Fukuoka Hall B)　Moderator　H. Sugiura
Tumor: Diagnosis

3-Po-377 Can a non-contact thermometer determine whether a soft tissue tumor is benign or malignant?
……*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

3-Po-379 Influence of lifestyles and lifestyle-related diseases on diagnosis of benign or malignant soft tissue tumors……*Taketsugu Fujibuchi, et al.,* Dept. of Bone and Joint Surg., Ehime Univ. Graduate School of Medicine…S1019

3-Po-380 The investigation of usefulness and indications for needle biopsy in soft tissue tumors
……*Naohiro Shinohara, et al.,* Dept. of Orthop. Surg., Graduate School of Medical and Dental Sciences, Kagoshima Univ.…S1019

3-Po-381 Review of reference sheet of malignant soft tissue tumor from a previous clinician
……*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 growth pattern……*Takashi Ariizumi, et al.,* Div. of Orthop. Surg., Dept. of Regenerative and Transplant Medicine, Niigata Univ. Graduate School of Medical and Dental Sciences…S1021

15：25～16：00 Poster (Booth No.2, Marine Messe Fukuoka Hall B) Moderator Y. Iwama
Sports: Knee 2

3-Po-384 Anatomical ACL reconstruction has little affect on lateral meniscus extrusion instead of partial perforation of the lateral meniscus during surgery
……*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 tear subjects……*Takanori Iriuchishima, et al.,* Dept. of Orthop., Shiroyama Hosp.…S1022

3-Po-386 One-year outcome and knee instability after ramp repair with all-inside device: Quantitative evaluation of pivot shift test using inertial sensor
……*Hiroaki Fukushima, et al.,* Dept. of Orthop. Surg., Nagoya City Univ., Graduate School of Medical Sciences…S1023

3-Po-387 Relationship increase of medial meniscal extrusion between pre-operation and 2-year follow-up after double-bundle ACL reconstruction and bone tunnel position
……*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 medial meniscus……*Akira Tsujii, et al.,* Dept. of Sports Medical Biomechanics, Graduate School of Medicine, Osaka Univ.…S1024

3-Po-389 Relationship between bone tunnel location and displacement in pull-out suture for medial meniscus posterior root tear using a cadaveric knee
……*Shuko Tsumoto, et al.,* Dept. of Orthop. Surg., Osaka Metropolitan Univ. Graduate School of Medicine…S1024

15：25～16：00 Poster (Booth No.3, Marine Messe Fukuoka Hall B) Moderator J. Hashimoto
Locomo: Epidemiology

3-Po-390 Factors in the development of locomotive syndrome in the coronary disaster: Yakumo study
……*Sadayuki Ito, et al.,* Dept. of Orthop./Rheumatology, Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine, Graduate School of Medicine, Nagoya Univ.…S1025

3-Po-391 Progression of locomotive syndrome and quality of life the level 3 reflects deterioration of physical and social functions
……*Taisuke Seki, et al.,* Dept. of Orthop. Surg., Aichi Medical Univ. Medical Center…S1025

3-Po-392 Influence of knee osteoarthritis severity on falls—A cross-sectional study using data from the locomotor health examination: LOHAS study
……*Tatsuru Sonobe, et al.,* Dept. of Orthop. Surg., Fukushima Medical Univ.…S1026

15：25～16：00 Poster (Booth No.4, Marine Messe Fukuoka Hall B) Moderator M. Yoshida
Computer assisted surgery: Shoulder & miscellaneous

15：25～16：00 Poster (Booth No.5, Marine Messe Fukuoka Hall B)
Perioperative complications: Lower limb 2 Moderator M. Inoue

15：25～16：00 Poster (English) (Booth No.6, Marine Messe Fukuoka Hall B) Moderator T. Sunagawa
Upper extremity

16：10～16：45 Poster (Booth No.7, Marine Messe Fukuoka Hall A) Moderator T. Torio
Adolescent idiopathic scoliosis: AIS 2

16：10 ～ 16：45　Poster (Booth No.8, Marine Messe Fukuoka Hall A)　Moderator　C. Ushiku
Spinal deformity 2

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

3-Po-429　Investigation of risk factors contributing to venous thromboembolism after posterior correction surgery for adult spinal deformity
……*Shuhei Mizobuchi, et al.,* Dept. of Orthop. Surg., Kochi Medical School, Kochi Univ.…S1047

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

16：10 ～ 16：45　Poster (Booth No.9, Marine Messe Fukuoka Hall A)　Moderator　H. Shigematsu
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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

16：10 ～ 16：45　Poster (Booth No.10, Marine Messe Fukuoka Hall A)　Moderator　T. Watanabe
ACL

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

16：10～16：45 Poster (Booth No.11, Marine Messe Fukuoka Hall A) Moderator T. Iwase
THA: Complication 2

16：10～16：45 Poster (Booth No.12, Marine Messe Fukuoka Hall A) Moderator T. Yasui
Patella & calcaneus fracture

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, Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine, 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

16：10～16：45 Poster (Booth No.1, Marine Messe Fukuoka Hall B) Moderator M. Hakozaki
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, Faculty of Medicine, Dentistry, and Pharmaceutical Sciences, Okayama Univ.…S1064

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., Institute of Biomedical Sciences, Tokushima Univ. Graduate School…S1065

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

16：10～16：45 Poster (Booth No.2, Marine Messe Fukuoka Hall B) Moderator Y. Takeda
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

16：10～16：45 Poster (Booth No.3, Marine Messe Fukuoka Hall B) Moderator T. Ogata
Locomo: Spine

16：10～16：45 Poster (Booth No.4, Marine Messe Fukuoka Hall B) Moderator T. Furuya
Artificial intelligence: Spine

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

16：10～16：45 Poster (English) (Booth No.6, Marine Messe Fukuoka Hall B) Moderator K. Kadoya
Spine basic & others

16：55～17：30 Poster (Booth No.7, Marine Messe Fukuoka Hall A) Moderator M. Miyagi
Adolescent idiopathic scoliosis: AIS 3

16：55～17：30 Poster (Booth No.8, Marine Messe Fukuoka Hall A) Moderator M. Ozaki
Spinal trauma 1

16：55 ～ 17：30　Poster (Booth No.9, Marine Messe Fukuoka Hall A)　Moderator　K. Nakanishi
Spine: New technology

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 surgery using CT-to-fluoro workflow
……*Atsuhiro Yoshida, et al.,* Dept. of Orthop. Surg., St. Marianna Univ. School of Medicine…S1094

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 fusion images with artificial intelligence technology
……*Daisuke Ukeba, et al.,* Dept. of Orthop. Surg., Faculty of Medicine and Graduate School of Medicine, Hokkaido Univ.…S1095

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3-Po-518 Evaluation of MRI in meniscus repair for the lateral discoid meniscus
…*Toshihiro Seki, et al.,* Dept. of Orthop. Surg., Yamaguchi Univ. Graduate School of Medicine…S1096

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

3-Po-520 Surgical outcomes of meniscus repair using fibrin clots wrapped in a polyglycolic acid sheet for aged 40 and over……*Yuki Yamanashi, et al.,* Dept. of Orthop. Surg., Aichi Medical Univ.…S1097

3-Po-521 Analytical method for the association between meniscal extrusion and distribution pattern of subchondral bone density across knee joint
……*Koji Iwasaki, et al.,* Dept. of Functional Reconstruction for the Knee Joint, Faculty of Medicine and Graduate School of Medicine, Hokkaido Univ.…S1097

3-Po-522 Analysis of the tibial tunnel coalition and clinical outcomes following anatomic double-bundle ACL reconstruction using a novel tibial guide system
……*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

3-Po-524 Factors associated with residual pivot shift after ACL reconstruction: A multicenter study
……*Atsuo Nakamae, et al.,* Dept. of Orthop. Surg., Graduate School of Biomedical and Health Sciences, Hiroshima Univ.…S1099

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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
……*Yuka Taguchi, et al.,* Dept. of Orthop. Surg., Hamamatsu Univ. School of Medicine…S1101

3-Po-528 Effect of preoperative spinal imbalance on mobility after total hip arthroplasty
……*Naofumi Taniguchi, et al.,* Dept. of Orthop. Surg., Graduate School of Medical Science, Univ. of Yamanashi…S1101

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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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
……*Tomoaki 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
……*Yoshiharu Shimozono, et al.,* Dept. of Orthop. Surg., Kyoto Shimogamo Hosp.…S1107

16：55 ～ 17：30　Poster (Booth No.1, Marine Messe Fukuoka Hall B)　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

16：55～17：30 Poster (Booth No.2, Marine Messe Fukuoka Hall B) Moderator N. Ochiai
Sports: Elbow

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, Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine, Graduate School of Medicine, Nagoya Univ.…S1115

16：55～17：30 Poster (Booth No.4, Marine Messe Fukuoka Hall B) Moderator S. Kawano
Infection 2

16：55～17：30 Poster (Booth No.5, Marine Messe Fukuoka Hall B) Moderator K. Inokuchi
Perioperative complications: Miscellaneous 1

16：55～17：30 Poster (English) (Booth No.6, Marine Messe Fukuoka Hall B) Moderator S. Fujibayashi
Lumbar spine 1

17：40～18：15 Poster (Booth No.7, Marine Messe Fukuoka Hall A)
Adolescent idiopathic scoliosis: AIS 4 Moderator K. Fukuda

17：40 ～ 18：15 Poster (Booth No.8, Marine Messe Fukuoka Hall A) Moderator Y. Yukawa
Spinal trauma 2

17：40 ～ 18：15 Poster (Booth No.9, Marine Messe Fukuoka Hall A) Moderator Y. Aoki
Spinal complication

17：40 ～ 18：15　Poster (Booth No.10, Marine Messe Fukuoka Hall A)　Moderator　T. Yasuda
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3-Po-601 The distribution of coronal plane alignment of the knee classification dose not change through the knee osteoarthritis progression ……*Kazuki Nomoto, et al.,* Hamamatsu Univ. Hosp.…S1143

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-608 Pathology and treatment of patients with undiagnosed hip pain referred by other doctors ……*Masashi Fujii, et al.,* Dept. of Orthop. Surg., Akita City Hosp.…S1147

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

3-Po-614 Comparison of bikini line incision and longitudinal incision in anterolateral supine approach THA ……*Tomohiko Shimizu,* Dept. of Orthop. Surg., Iwata City Hosp.…S1150

17：40 ～ 18：15　Poster (Booth No.12, Marine Messe Fukuoka Hall A)　Moderator　Y. Kaneko
Miscellaneous: Trauma

3-Po-615 Usefulness of X-ray examinations for orthopaedic diseases at house call medical services ……*Hiroshi Kawamura,* Mukogawa Home Clinic…S1151

17：40～18：15 Poster (Booth No.1, Marine Messe Fukuoka Hall B) Moderator K. Hayashi
Tumor: Miscellaneous

17：40～18：15 Poster (Booth No.2, Marine Messe Fukuoka Hall B) Moderator K. Watanabe
Sports: Foot & ankle

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

17：40 ～ 18：15 Poster (Booth No.3, Marine Messe Fukuoka Hall B) Moderator O. Obayashi
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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

17：40 ～ 18：15 Poster (Booth No.4, Marine Messe Fukuoka Hall B) Moderator T. Hayama
Infection 3

3-Po-643 Auxiliary diagnostic tool for spinal infections: Features and considerations of alpha-defensin lateral flow test ……*Atsuhiro 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

3-Po-649 Lower extremity fractures treatment of circular external fixator in elderly patients with hemorrhagic blisters
……*Koji Nozaka, et al.,* Dept. of Orthop. Surg., Akita Univ. Graduate School of Medicine…S1170

17：40～18：15 Poster (Booth No.5, Marine Messe Fukuoka Hall B) Moderator S. Mori
Perioperative complications: Miscellaneous 2

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 Rehabilitaion 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?: A study of patients after total knee arthroplasty
……*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

17：40～18：15 Poster (English) (Booth No.6, Marine Messe Fukuoka Hall B) Moderator Y. Murata
Lumbar spine 2

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 Suvithayasiri, 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 abcess
……*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

4th Day May 26 Room 1

8：00～9：20 Symposium 57 Moderators N. Takahira, T. Jinno
Joint-preserving treatment for idiopathic osteonecrosis of the femoral head

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

9：35～10：35 Special lecture 4 Moderator M. Nakamura

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

11：50～13：00 Luncheon seminar 36 Moderator M. Takaso

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

4th Day May 26 Room 2

8：00～9：20 JOA Directors' Proposed Symposium 4 Moderators R. Kuroda, M. Sato
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
Fostering women leaders in the field of orthopaedics

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, Dentistry, and Pharmaceutical Sciences, Okayama Univ.…S1188

4-2-JS5-4　Current status and challenges in the teaching of female orthopaedic surgeons by male supervisors……*Yoshiaki Wakabayashi, et al.,* Dept. of Orthop. Surg., Yokohama City Minato Red Cross Hosp.…S1188

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

11：50 ～ 13：00　Luncheon seminar 37　Moderator　M. Ishikawa

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

13：15 ～ 14：15　Instructional lecture 55　Moderator　T. Matsushita

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

4th Day　May 26　Room 3

8：00 ～ 9：20　JOA Directors' Proposed Symposium 6　Moderators　H. Katagiri, H. Kawano
Mastering the treatment of bone metastasis

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 Rehb., 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

11：50～13：00 Luncheon seminar 42 Moderator Y. Kawaguchi

13：15～14：15 Instructional lecture 65 Moderator H. Taneichi

4th Day May 26 Room 8

8：00～9：00 Instructional lecture 66 Moderator T. Nakamura

9：15～10：15 Free papers Sports Moderator T. Hashimoto, D. Araki

10：30～11：30 Free papers RA 2 Moderators T. Matsubara, H. Miyahara

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

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

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

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

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

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 Medicine…S1250

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 Center…S1252

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

4-Po-10　Evaluation of medial meniscus extrusion of pullout repair combined with circumferential fiver augmentation for medial meniscus posterior root tear
····*Yuya Kodama, et al.,* Dept. of Orthop. Surg., Okayama Rosai Hosp.…S1255

4-Po-11　Evaluation of factors affecting healing after medial meniscus root repair for medial meniscus root tear using second-look arthroscopy
····*Shinya Yanagisawa, et al.,* Zenshukai Hosp. Gunma Sports Medicine Research Center…S1255

4-Po-12　Longitudinal changes in meniscus tissue after medial meniscus posterior root repair by MRI evaluations ····*Koki Kawada, et al.,* Dept. of Orthop. Surg., Science of Functional Recovery and Reconstruction, Faculty of Medicine, Dentistry, and Pharmaceutical Sciences, Okayama Univ.…S1256

9：15～9：50 Poster (Booth No.3, Marine Messe Fukuoka Hall B) Moderator S. Nagao
Thumb CMC joint arthritis

9：15～9：50 Poster (Booth No.4, Marine Messe Fukuoka Hall B) Moderator D. Osada
Distal radius fracture

9：15 ～ 9：50　Poster (Booth No.5, Marine Messe Fukuoka Hall B)　Moderator　H. Futani
Tumor: Benign

4-Po-29 Enhancing ADL/QOL in primary musculoskeletal tumor patients: A fibrous dysplasia survey using JOA tumor registry data
……*Masayuki Morishita, et al.,* Dept. of Orthop. Surg., Kobe Children's Hosp.…S1266

4-Po-30 Clinical studies on the etiology of pes anserinus bony spurs
……*Tomoya Matsunobu, et al.,* Dept. of Orthop. Surg., Kyushu Rosai Hosp.…S1266

4-Po-31 Arthroscopic treatment for the patients with hip synovial chondromatosis
……*Takahiro Negayama, et al.,* Dept. of Orthop. Surg., Wakamatsu Hosp. of the Univ. of Occupational and Environmental Health…S1267

4-Po-32 MRI and pathological evaluation of schwannoma characteristics in extremity and trunk
……*Yoshikuni Mimata, et al.,* Dept. of Orthop. Surg., Iwate Medical Univ.…S1267

4-Po-33 The factors about the clinical symptoms and treatment strategy of schwannoma
……*Ryohei Adachi, et al.,* Dept. of Musculoskeletal Surg., Dept. of Multimodality Therapy for Cancer, Mie Univ. Graduate School of Medicine…S1268

4-Po-34 Activities to improve ADL/QOL in patients with primary musculoskeletal tumors: Questionnaire survey of neurofibroma treatment in JOA certified facilities
……*Yoshihiro Nishida, et al.,* Dept. of Rehabilitation, Nagoya Univ. Hosp.…S1268

9：15 ～ 9：50　Poster (Booth No.6, Marine Messe Fukuoka Hall B)　Moderator　Y. Nasu
RA: Miscellaneous 3

4-Po-35 The status of rheumatoid arthritis patients in Yamaguchi Prefecture from the onset of disease to diagnosis and treatment
……*Keiko Kamata, et al.,* Dept. of Orthop. Surg., Yamaguchi Prefectural Grand Medical Center…S1269

4-Po-36 Circulated cooperation of the hospital and polyclinic for treatment of rheumatoid arthritis in Yamagata area: YARANNA network
……*Yuya Takakubo, et al.,* Dept. of Orthop. Surg., Yamagata Univ.…S1269

4-Po-37 Current status of hemophilic arthropathy in Ehime Prefecture
……*Tatsuhiko Kutsuna, et al.,* Dept. of Bone and Joint Surg., Ehime Univ. Graduate School of Medicine…S1270

4-Po-38 Elucidation of factors associated with spinal anxylosing progression in patients with axial spondyloarthritis……*Takuya Izumiyama, et al.,* Dept. of Orthop. Surg., Tohoku Univ. Graduate School of Medicine…S1270

4-Po-39 Characteristics of rheumatoid arthritis patients who have onset from knee monoarthritis and risk factors of transition to polyarthritis
……*Yusuke Sugimura, et al.,* Dept. of Orthop. Surg., Akita Rosai Hosp.…S1271

4-Po-40 24 patients with rheumatoid arthritis complicated by non-tuberculous mycobacterium tuberculosis……*Hironobu Kosugiyama, et al.,* Dept. of Orthop./Rheumatology, Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine, Graduate School of Medicine, Nagoya Univ.…S1271

4-Po-41 Differences in physical function between late-onset rheumatoid arthritis and young-onset rheumatoid arthritis
……*Yuki Saito, et al.,* Dept. of Orthop./Rheumatology, Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine, Graduate School of Medicine, Nagoya Univ.…S1272

9：15 ～ 9：50　Poster (Booth No.7, Marine Messe Fukuoka Hall A)　Moderator　A. Fujie
Osteoporosis: Miscellaneous

4-Po-42 Atypical lumbar pedicle fracture in three elderly patients on long-term bisphosphonate therapy
……*Ren Kikuchi, et al.,* Dept. of Orthop. Surg., Niigata Rousai Hosp.…S1273

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 adult-onset hypophosphatasia
……*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
……*Wataru Hatanaka,* Dept. of Orthop. Surg., Sapporo Central Hosp.…S1274

4-Po-46 The effect of vitamin K deficiency on bone metabolism and bone mineral density in patients undergoing spine surgery
……*Daisuke Kudo, et al.,* Dept. of Orthop. Surg., Akita Univ. Graduate School of Medicine…S1275

4-Po-47 The incidence of limbs and pelvis fragility fracture after operated total knee arthroplasty and the osteoporosis treatment……*Ken Ikuta, et al.,* Dept. of Orthop. Surg., Nagoya Medical Center…S1275

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., Shiga Univ. of Medical Science…S1276

9：15 ～ 9：50　Poster (Booth No.8, Marine Messe Fukuoka Hall A)　Moderator　K. Kaneda
Foot 2

4-Po-49 The depth of the dorsalis pedis artery between the first and second metatarsals: A cadaveric study……*Taro Fujimaki, et al.,* Dept. of Orthop. Surg., Graduate School of Medical Science, Univ. of Yamanashi…S1277

4-Po-50 3D analysis of windlass mechanism and metatarsus primus elevatus using a weightbearing CT in patients with hallux rigidus and control
……*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
……*Masato Ogawa, et al.,* Laketown Orthop. Hosp.…S1278

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., The Univ. of Tokyo Hosp., The Univ. of Tokyo…S1279

4-Po-54 A modified combined tibialis anterior and posterior tendon transfer for paralytic equinovarus foot in pediatric patients
……*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 decision of tendon suture tension
……*Tomohito Tokushige, et al.,* Dept. of Orthop. Surg., Teikyo Univ.…S1280

9：15～9：50　Poster (Booth No.9, Marine Messe Fukuoka Hall A)　Moderator　R. Murakami
Pediatric orthopaedics: Miscellaneous

4-Po-56　Genetic testing for skeletal dysplasia using whole-exome sequencing
……*Kenichi Mishima, et al.,* Dept. of Orthop./Rheumatology, Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine, Graduate School of Medicine, Nagoya Univ.…S1281

4-Po-57　Pathogenesis of recurrent solitary bone cyst
……*Manabu Hoshi, et al.,* Dept. of Orthop. Surg., Osaka City General Hosp.…S1281

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, Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine, Graduate School of Medicine, Nagoya Univ.…S1282

4-Po-59　3D gait analysis of children with limb length discrepancy using gait profile score and gait variable scores……*Daigo Shiraishi, et al.,* Dept. of Orthop. Surg., Hokkaido Medical Center for Child Health and Rehabilitation…S1282

4-Po-60　Guided growth for pediatric bowleg…*Reiko Murakami,* Niigata Univ. Medical and Dental Hosp.…S1283

4-Po-61　Birth-related fracture in newborns: Risk factor and management
……*Yuji Hatakeyama, et al.,* Akita Red Cross Hosp.…S1283

4-Po-62　A study of steroid-induced osteonecrosis of the femoral head in children in our hospital
……*Yoshitsugu Fukuda, et al.,* Dept. of Orthop. Surg., National Center for Child Health and Development…S1284

9：15～9：50　Poster (Booth No.10, Marine Messe Fukuoka Hall A)　Moderator　T. Tateiwa
Infection 4

4-Po-63　Molecular analysis of the effects of control measures, including decolonization and hand hygiene, on orthopaedic SSIs caused by MRSA
….*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

4-Po-66　Investigation of intraoperative bacterial adhesion of femoral rasp in total hip arthroplasty
……*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 for infection
……*Hiroaki Kijima, et al.,* Dept. of Orthop. Surg., Akita Univ. Graduate School of Medicine…S1287

4-Po-68　Postoperative wound management and SSI prevention methods without the use of disinfectant in upper extremity cases
……*Osamu Nakamura,* Dept. of Orthop. Surg., Kagawa Prefectural Shirotori Hosp.…S1287

4-Po-69　Relationship between neutrophil counts in intraoperative specimens and worsening infection in the treatment of fracture-related infection by the Masquelet technique
……*Shuya Takahashi, et al.,* Dept. of Orthop. Surg., Teikyo Univ.…S1288

9：15 ～ 9：50　Poster (Booth No.11, Marine Messe Fukuoka Hall A)　Moderator　H. Okamoto
Miscellaneous 2

10：00 ～ 10：35　Poster (Booth No.1, Marine Messe Fukuoka Hall B)　Moderator　H. Nakajima
Spine & spinal cord tumor

10：00～10：35　Poster (Booth No.2, Marine Messe Fukuoka Hall B)　Moderator　Y. Hoshino
Meniscus 2

4-Po-84　Prediction of bone marrow lesion using radiography
……*Shohei Murata, et al.,* Dept. of Orthop. Surg., Ogachi Central Hosp.…S1297

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

4-Po-89　The relative location changes of saphenous nerve and the infrapatellar branch according to the knee flexion angle: A cadaveric study
……*Akihito Kawai, et al.,* Dept. of Orthop. Surg., Nara Medical Univ.…S1299

4-Po-90　Prevention of portal pain after knee arthroscopy by radial pressure wave
……*Katsuhiro Yoshida,* Fujita General Hosp.…S1300

10：00～10：35　Poster (Booth No.3, Marine Messe Fukuoka Hall B)　Moderator　M. Tatebe
Osteoarthritis & rheumatoid arthritis

4-Po-91　Placebo effects in hand osteoarthritis trials: A systematic review and meta-analysis
……*Yasunobu Nakagawa, et al.,* Center for Advanced Medicine and Clinical Research, Nagoya Univ. Hosp.…S1301

4-Po-92　Hormone replacement therapy improved hand pain and dysfunction due to symptomatic hand osteoarthritis in menopause: Retrospective case-control study
……*Hiromi Sasaki, et al.,* Dept. of Orthop. Surg., Graduate School of Medical and Dental Sciences, Kagoshima Univ.…S1301

4-Po-93　Effects of equal on hand osteoarthritis in perimenopausal women: Pilot study
……*Takashi Shimoe, et al.,* Dept. of Orthop. Surg., Wakayama Medical Univ.…S1302

4-Po-94　Radiographic and blood sampling findings of symptomatic hand osteoarthritis
……*Takashi Kuroiwa, et al.,* Dept. of Orthop. Surg., Fujita Health Univ.…S1302

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
……*Taisei Kawamoto, et al.,* Dept. of Orthop. Surg., Matsudo City General Hosp.…S1304

10：00～10：35　Poster (Booth No.4, Marine Messe Fukuoka Hall B)　Moderator　N. Kodama
Wrist fracture

4-Po-98　Median nerve dysfunction after distal radius fracture treated with volar locking plate
……*Takenori Saeki, et al.,* Dept. of Hand Surg., Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine, Graduate School of Medicine, Nagoya Univ.…S1305

4-Po-99　Inflammatory signs after distal radius fracture surgery are a poor outcome factor
……*Toshiyasu Sakurai, et al.,* Dept. of Orthop. Reha., Aizawa Hosp.…S1305

10：00～10：35 Poster (Booth No.5, Marine Messe Fukuoka Hall B) Moderator K. Honoki
Tumor: Basic research

10：00～10：35 Poster (Booth No.6, Marine Messe Fukuoka Hall B) Moderator Y. Yasui
Sports: Miscellaneous 1

10：00～10：35 Poster (Booth No.7, Marine Messe Fukuoka Hall A) Moderator C. Minamitani
Osteoporosis: Fracture risk

10：00～10：35 Poster (Booth No.8, Marine Messe Fukuoka Hall A) Moderator K. Sato
Locomo: Cancer & metabolic syndrome

4-Po-132 Relationship between locomo 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

10：00～10：35 Poster (Booth No.9, Marine Messe Fukuoka Hall A) Moderator Y. Yoshii
Artificial intelligence: Imaging

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

10：00～10：35 Poster (Booth No.10, Marine Messe Fukuoka Hall A) Moderator K. Endo
Pain: Central sensitization

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, Graduate School of Medicine, Nagoya Univ.…S1329

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 rotator cuff tears……*Taisuke Nozu, et al.,* Saiseikai Nakatsu Hosp.…S1330

4-Po-143 Comparison of outcome between quantitative sensory testing and central sensitization inventory in chronic pain patients
……*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

10：00 ～ 10：35　Poster (Booth No.11, Marine Messe Fukuoka Hall A)　Moderator　T. Aoki
Miscellaneous 3

10：45 ～ 11：20　Poster (Booth No.1, Marine Messe Fukuoka Hall B)　Moderator　T. Kobayashi
Spinal cord disease

10：45 ～ 11：20　Poster (Booth No.2, Marine Messe Fukuoka Hall B)　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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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 superial 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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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 end-to-side technique ···*Makoto Motomiya, et al.,* Dept. of Orthop. Surg., Obihiro Kosei Hosp.…S1351

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

10：45 ～ 11：20　Poster (Booth No.5, Marine Messe Fukuoka Hall B)　Moderator　T. Manaka
Reverse shoulder arthroplasty

4-Po-182 Results of reverse shoulder arthroplasty to obtain external rotation function
·····*Kohei Uekama, et al.,* Dept. of Orthop. Surg., Graduate School of Medical and Dental Sciences, Kagoshima Univ.…S1353

4-Po-183 Clinical outcomes and disease characteristics focused on baseplate inclination after reverse shoulder arthroplasty
·····*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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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

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Locomo: Miscellaneous

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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Artificial intelligence: Miscellaneous

4-Po-210 Initiatives toward telemedicine for osteoporosis treatment using automatic diagnosis of thoracolumbar vertebral fractures using AI
……*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
……*Kazuya Tsukamoto, et al.,* Dept. of Orthop. and Spinal Surg., Graduate School of Medical and Dental Sciences, Tokyo Medical and Dental Univ.…S1370

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., The Univ. of Tokyo Hosp., The Univ. of Tokyo…S1370

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

10：45～11：20 Poster (Booth No.10, Marine Messe Fukuoka Hall A) Moderator K. Hashiguchi
Chronic pain: Joint

4-Po-218 Examination of postoperative pain in cementless total hip arthroplasty
……*Kazuki Hirose, et al.,* Kochi Health Sciences Center…S1373

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., Shiga Univ. of Medical Science…S1374

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., Program in Integrated Medicine, Graduate School of Medicine, Nagoya Univ.…S1375

4-Po-224 Gene expression profile in the dorsal horn in spinal cord injury after intravenous infusion of mesenchymal stem cells
……*Ryunosuke Fukushi, et al.,* Dept. of Orthop. Surg., Sapporo Medical Univ.…S1376

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4-Po-225 Anatomical analysis of the S1 neural foramen using three-dimensional computed tomography imaging: Insights for effective S1 nerve root block
……*Noritaka Suzuki, et al.,* Dept. of Orthop. Surg., Seirei Sakura Citizen Hosp.…S1377

4-Po-226 Investigation of neurologic deficits after surgery for schwannoma around the brachial plexus: Reviewing the past 21 years
……*Sota Saeki, et al.,* Dept. of Hand Surg., Musculoskeletal and Cutaneous Surg., Program in Integrated Medicine, Graduate School of Medicine, Nagoya Univ.…S1377

4-Po-227 Neurolysis using 3D digital microscope in patients with peripheral nerve disorders
……*Kiyohito Naito, et al.,* Dept. of Orthop., Juntendo Univ.…S1378

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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