



# Programs

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# DAY1 January 31(Sat.)

## 8:30~Opening Ceremony

### Symposium ①

8:40-10:10 [RoomA]

#### Joint line obliquity after knee osteotomy

[ Chairperson ] **Ken Okazaki** (Tokyo Women's Medical University, Japan)  
**Kang Seung Baik** (Seoul Baedro Hospital, Korea)

- SY1-1** **Effects of Correction Angle and Joint Line Obliquity on Knee Biomechanics in Open Wedge High Tibial Osteotomy**  
Kyoto University, Japan Shinichi Kuriyama
- SY1-2** **Postoperative MPTA as the primary determinant of KJLO following AKO**  
Fureai Yokohama Hospital, Japan Yasushi Akamatsu
- SY1-3** **Joint line obliquity after double level osteotomy**  
Hyogo Medical University, Japan Hiroshi Nakayama
- SY1-4** **Avoiding Excessive Joint Line Obliquity after High Tibial Osteotomy: The Importance of Preoperative Deformity Analysis.**  
Kanazawa Munehiro Hospital, Japan Kenichi Goshima
- SY1-5** **What Is the Meaning of the Joint Line Obliquity in Osteotomy?**  
Seoul National university Bundang Hospital, Korea Yong Seuk Lee
- SY1-6** **Changes of Knee Joint and Ankle Joint Orientations after Medial Opening-wedge High Tibial Osteotomy**  
Director, Chang Gung Memorial Hospital, Taiwan Yi-Sheng Chan

### Oral Presentation 1

10:15-10:39 [RoomA]

#### OW vs CW 1

[ Chairperson ] **Masami Tokunaga** (Fukuoka Orthopaedic Hospital, Japan)  
**Lee Kong Hwee** (Singapore Health Services, Singapore General Hospital, Singapore)

- OS1-1** **Hybrid Lateral Closed-Wedge High Tibial Osteotomy Showed Similar Accuracy in Angular Correction and Reduction of Posterior Tibial Slope Compared to Opening-Wedge High Tibial Osteotomy: A Correction Angle Matched Cohort Study**  
Pusan National University Hospital, College of Medicine, Korea Seung Joon Rhee
- OS1-2** **Differences in Patellofemoral Alignment and Proximal Tibiofibular Joint Changes Between Open Wedge Distal Tibial Osteotomy and Closed Wedge High Tibial Osteotomy for Medial Knee Osteoarthritis**  
Juntendo University, Japan Youngji Kim
- OS1-3** **Clinical outcomes of hybrid lateral closed wedge high tibial osteotomy in medial osteoarthritic knees with ACL insufficiency**  
Nishinomiya Kaisei Hospital, Japan Ryo Ueshima
- OS1-4** **Return to Sports after Inverted V-Shaped High Tibial Osteotomy for Severe Medial Knee Osteoarthritis: Comparison with Medial Opening Wedge High Tibial Osteotomy**  
Hokkaido University, Japan Taku Ebata

**OW vs CW 2**[ Chairperson ] **Yasuhiro Takahara**  
**Yi-Sheng Chan**(Nippon Kokan Fukuyama Hospital, Japan)  
(Chang Gung Memorial Hospital, Taiwan)

- OS2-1 Equivalent Correction Requirements but Different Limb-Length Effects Between OWHTO and HBHTO: Analysis of 99 Virtual Simulations**  
Department of Orthopaedic Surgery, Daegu Fatima Hospital, Korea Jae Hwi Han
- OS2-2 Anterior Closing-Wedge Osteotomy (ACWO) for Revision ACL Reconstruction: Midterm Outcomes in Four Cases**  
Nagoya City University, Japan Kyohei Ota
- OS2-3 Characterizing Japanese valgus knees and simulation of around the knee osteotomy**  
Nagoya City University Graduate School of Medical Sciences, Japan Kensaku Abe
- OS2-4 The Effect of Hybrid Closed Wedge High Tibial Osteotomy on Joint Line Convergence Angle**  
Sports & Arthroscopy Center, Hanna Central Hospital, Japan Yasuyuki Kawaguchi

**Invited Lecture****11:05-12:15 [RoomA]****Sophisticated Joint-Preserving Surgical Techniques**[ Chairperson ] **Kyung Wook Nha** (Department of Orthopaedic Surgery, Inje University Ilsan Paik Hospital, Korea)  
**Shuichi Matsuda** (Graduate School of Medicine and Faculty of Medicine, Kyoto University, Japan)

- IL-1 Rotational osteotomies of the lower limb - an update on diagnostics, normative values, rationals and surgical techniques**  
Sana Klinikum Lichtenfels, Germany Jörg Harrer
- IL-2 Inverted V-shaped High Tibial Osteotomy: A Promising Alternative to Conventional Techniques for Severe Varus Knee OA**  
Yagi Orthopaedic Hospital, Japan Kazunori Yasuda
- Sponserd: Newclip Technics Japan K.K.*

**Luncheon Seminar ①****12:20-13:20 [RoomA]****Current topics in osteotomies around the knee**[ Chairperson ] **Shuheji Otsuki** (Osaka Medical and Pharmaceutical University, Japan)

- LS1-1 Current topics in high tibial osteotomy**  
Yokohama City University, Japan Shuntaro Nejima
- LS1-2 Osteotomies for knee ligament instability: When, Why and How?**  
Department of Orthopaedic Surgery, Meiwa Hospital, Japan Takehiko Matsushita
- Sponserd: OSferion Biomaterials Corp.*

**Panel Discussion ①****13:20-14:50 [RoomA]****Additional knee osteotomy procedures**

[ Moderator ] **Go Omori** (Niigata University of Health and Welfare, Japan)  
**Kang-il Kim** (Kyung Hee University, Korea)

<b>PD1-1</b>	<b>Open wedge high tibial osteotomy combined with MMPRT repair and meniscal centralization - Indications, surgical procedure, and its limitations and challenges –</b>	Harue Hospital, Japan	Ryuichi Nakamura
<b>PD1-2</b>	<b>Clinical Outcomes of High Tibial Osteotomy with ACL Reconstruction in Patients with ACL Deficiency and Medial Osteoarthritis</b>	Kobe University, Japan	Kyohei Nishida
<b>PD1-3</b>	<b>Additional Cartilage Repair Strategies in Around-the-Knee Osteotomy: From Indications to Clinical Outcomes</b>	Kameda Medical Center, Japan	Yuki Kato
<b>PD1-4</b>	<b>Treatment of osteoarthritic knee with high tibial osteotomy and allogeneic human umbilical cord blood-derived mesenchymal stem cells combined with hyaluronate hydrogel composite</b>	The Catholic University of Korea, Korea	Seok Jung Kim
<b>PD1-5</b>	<b>Distal femoral osteotomy with medial patellofemoral ligament reconstruction for recurrent patellar dislocation</b>	Korea University Guro Hospital, Korea	Bae Ji Hoon
<b>PD1-6</b>	<b>Fresh Femoral Osteochondral Allograft Transplantation Using a Single-Plug Technique for Large Osteochondral Defects of the Knee</b>	Singapore General Hospital, Singapore	Soong Junwei

**Afternoon Seminar ①****15:00-16:00 [RoomA]****Characteristics, Indications, and Complications of the Oxford UKA — Why Not Include the Oxford in Your Arsenal?**

[ Chairperson ] **Masataka Deie** (Hiroshima City Hiroshima Citizens Hospital, Japan)

<b>AS1</b>	<b>Characteristics, Indications, and Complications of the Oxford UKA — Why Not Include the Oxford in Your Arsenal?</b>	Wajo-kai Sapporo Hospital, Japan	Hidetoshi Hamaguchi
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*Sponserd: Zimmer Biomet G.K.*

**Special Lecture****16:10-17:10 [RoomA]****Next generation solution for knee osteotomy**

[ Chairperson ] **Takeshi Sawaguchi** (Trauma Reconstruction Center, Shinyurigaoka General Hospital, Japan)  
**Jia Lin Wu** (Taipei Medical University Hospital, Taiwan)

<b>SL-1</b>	<b>Complication management of osteotomies around the knee</b>	Hokkaido University, Japan	Eiji Kondo
<b>SL-2</b>	<b>Next Generation Plate for Knee Osteotomy – Continuous Drive for Improvement</b>	Kyung Hee University, Korea	Kang-il Kim

*Sponserd: Johnson & Johnson*

**Next generation solution for knee osteotomy**

[ Chairperson ] **Masahiko Ikeuchi** (Kochi Medical School, Japan)

**ES-1 Patient-Specific Instrumentation in Knee Preservation Osteotomies**

Taipei Medical University Hospita, Taiwan

Jia Lin Wu

**ES-2 1st line conservative treatment of MM root tear and 2nd line operation**

Department of Orthopaedic Surgery, Inje University Ilsan Paik Hospital, Korea

Kyung Wook Nha

**Oral Presentation 3**

**AKO with additional surgery 1**

[ Chairperson ] **Keisuke Kita** (JCHO Osaka Hospital, Japan)

**Sim Jae ang** (Gachon University. Gil Medical Center, Incheon, Korea)

**OS3-1 Change of the lateral joint space width is similar, but improvement of knee score is greater in patients with a non-discoid than in those with a discoid lateral meniscus after open wedge high tibial osteotomy**

Department of Orthopaedic Surgery, Nowon Eulji Medical Center, Seoul, Korea

Nam-Hong Choi

**OS3-2 Remodified Mason–Allen suture technique concomitant with high tibial osteotomy for medial meniscus posterior root tears improved the healing of the repaired root and suppressed osteoarthritis progression**

Chungnam national university hospital, Korea

Park Young Cheol

**OS3-3 Comparison of functional outcomes and 15 years survivorship of Medial Opening Wedge High Tibial Osteotomy in kissing vs non kissing lesion patients**

AIIMS Jodhpur, Rajasthan, India

Ashraf Jamal

**OS3-4 Pullout Repair with Double-Plate Fixation via Inverted High Tibial Osteotomy for Medial Meniscus Posterior Root Tear with Severe Varus Tibial Deformity**

Department of Orthopaedic Surgery, Okayama University Hospital, Okayama, Japan

Toshiki Kohara

**OS3-5 High Tibial Osteotomy with Individualized Alignment and Meniscal Centralization Improves KOOS Sports and Recreation and Cartilage Status Compared to Conventional Fujisawa-Point Alignment without centralization: A Propensity Score Matching Study.**

Department of orthopaedic surgery, Sapporo Medical University School of Medicine, Japan

Kazushi Horita

**Oral Presentation 4****9:10-9:40 [RoomB]****AKO with additional surgery 2**[ Chairperson ] **Yasuyuki Kawaguchi**  
**Kunihiko Hiramatsu**

(Hanna Central Hospital, Japan)

(Hiramatsu Orthopedic Clinic Namba Knee &amp; Sports Clinic, Japan)

- OS4-1**     **Repair of medial meniscus posterior root tear using all-inside meniscal repair device is not necessary during open wedge HTO**  
Kyungpook National University Hospital, Korea     Hee-June Kim
- OS4-2**     **Leave It or Repair It? Comparison of the Arthroscopic and Clinical Outcomes after High Tibial Osteotomy with or without Medial Meniscus Posterior Root Repair**  
Department of Orthopaedics, Taipei Medical University Hospital, Taiwan     Ying-Fong Su
- OS4-3**     **Long-Term (>10-Year) Outcomes of High Tibial Osteotomy Versus Medial Meniscus Posterior Root Repair in Degenerative Knees with MMPRT's**  
Datta meghe medical college, Wardha, India     Rahul Singh
- OS4-4**     **High tibial osteotomy reduces the distraction force at the tear site in medial meniscus tear of posterior segment: A porcine biomechanical study**  
Department of Orthopaedic Surgery, Sapporo Medical University School of Medicine, Japan     Kodai Hamaoka
- OS4-5**     **Time-Dependent Anchor Hole Expansion May Associate With Meniscal Extrusion After Open-Wedge High Tibial Osteotomy Combined With Medial Meniscus Posterior Root Tear Repair and Meniscal Centralization**  
1)Department of Orthopedic Surgery, Joint Preservation and Sports Orthopedic Center, Harue Hospital, Japan     Yohei Maeda  
2)Department of Orthopedic Surgery, Asahikawa Medical University, Japan

**Oral Presentation 5****9:40-10:10 [RoomB]****CWHTO and TCVO 1**[ Chairperson ] **Akihiko Yonekura**  
**Yukinobu Nishii**

(Nagasaki University Hospital, Japan)

(Chikamori Hospital, Japan)

- OS5-1**     **Comparative Analysis of Bone Resection Volume and Lateral Overhang in Four Closed-Wedge High Tibial Osteotomy Techniques**  
Pusan National University Hospital, College of Medicine, Pusan National University, Korea     Seok Jin Jung
- OS5-2**     **Peroneal Palsy and Nonunion After Closing Wedge High Tibial Osteotomy: Does Surgical Technique Matter?**  
ESIC Model Hospital, India     Pankaj sainin kumar
- OS5-3**     **Development and Clinical Evaluation of a Flexible Spring Plate Insole to Prevent Postoperative Deformity Following HCWHTO: Effects on Lateral Tibial Acceleration and Calcaneal Pronation**  
Department of Rehabilitation, Yokohama Sekishinkai Hospital, Japan     Mizuki Saito
- OS5-4**     **Clinical Significance of Fibular Management in Closed-Wedge High Tibial Osteotomy: Comparison Between Conventional Dissection and AOOL Techniques**  
Okayama Kyokuto Hospital, Japan     Masamichi Yokoyama
- OS5-5**     **Extension-Type Checkrein Deformity of the Hallux Following Closed-Wedge High Tibial Osteotomy: A Case Report**  
Wakamatsu hospital of University of Occupational and Environmental Health Japan, Japan     Shinichiro Takada

**Oral Presentation 6**

10:10-10:40 [RoomB]

**CWHTO and TCVO 2**[ Chairperson ] **Umito Kuwashima**  
**Kim Seok Jung**(Tokyo Women's Medical University , Japan)  
(Uijeongbu St. Mary's Hospital The Catholic University )

- OS6-1 Two-year Outcomes of Tibial-Sided Osteotomy for Fibula Untethering in Lateral Close-Wedge High Tibial Osteotomy**  
Seoul St. Mary's Hospital, The Catholic University of Korea Yong In
- OS6-2 Usefulness of Hybrid Closed Wedge High Tibial Osteotomy against ACL Deficiency, Increased Posterior Tibial Slope ,and Osteoarthritis.**  
Department of Orthopaedic Surgery, Yaesekai Doujin Hospital, Japan Tomoyuki Shimakawa
- OS6-3 The medial collateral ligament and osteophytes affect medial meniscus extrusion after CWHTO**  
Department of Orthopaedic Surgery, Faculty of Medicine, Fukuoka University, Japan Tetsuro Ishimatsu
- OS6-4 A study of knee joint instability and intra-articular changes before and after Tibial Condylar Valgus Osteotomy (TCVO) for osteoarthritis of the knee**  
Chikamori Hospital, Japan Yukinobu Nishii
- OS6-5 Tibial condylar valgus osteotomy (TCVO): Surgical technique and clinical results for knee osteoarthritis with varus deformity**  
Nagasaki Yurino Hospital , The institute for Foot &Ankle reconstruction, Japan Tsukasa Teramoto

**Oral Presentation 7**

10:40-11:10 [RoomB]

**AKO operative technique**[ Chairperson ] **Akira Maeyama**  
**Lee yong Seuk**(Fukuoka University Hospital, Japan)  
(Seoul National University, Bundang Hospital, Korea)

- OS7-1 Where is the optimal starting point in medial open wedge high tibial osteotomy? - 3D tibia model finite element study-**  
Inje University Haeundae Paik Hospital, Korea Sang Won Moon
- OS7-2 The Effect of Bioabsorbable Fillers on Optimizing Screw Fixation and Enhancing Mechanical Stability in High Tibial Osteotomy**  
1) Department of Orthopaedics, Taipei Medical University Hospital, Taiwan  
2) Department of Orthopedics, School of Medicine, College of Medicine, Taipei Medical University, Taiwan Jia-Lin Wu
- OS7-3 Proximal Fibular Osteotomy for Medial Compartment Knee Osteoarthritis: Two-Year Functional and Biomechanical Outcomes**  
1) Singapore Knee Preservation Society, Singapore  
2) Department of Orthopaedic Surgery, Singapore General Hospital, Singapore Zhen Jonathan Liang
- OS7-4 Application of Custom Guide-Assisted Corrective Osteotomy for Lower Limb Deformities: A Case Series.**  
Department of Sports Medical Biomechanics, The University of Osaka Graduate School of Medicine, Japan Akira Tsujii
- OS7-5 Preoperative Subchondral Bone Density Distribution Assessed by CT-Osteoabsorptiometry Predicts Clinical Outcomes After High Tibial Osteotomy**  
Hokkaido University, Japan Koji Iwasaki

## Oral Presentation 8

11:10-11:46 [RoomB]

### AKO coronal alignment 1

[ Chairperson ] **Koji Iwasaki**  
**Jia-Lin Wu**

(Hokkaido University, Japan)

(Taipei Medical University Hospital, Taiwan)

- OS8-1 Constitutional Alignment is Related to Serial Alignment Change after Opening-Wedge High Tibial Osteotomy**  
Seoul National University Bundang Hospital, Korea Yong Seuk Lee
- OS8-2 Medial Opening Wedge High Tibial Osteotomy - do coronal plane phenotypes matter?**  
Department of Orthopaedic Surgery, Singapore General Hospital, Singapore Teo Shao Jin
- OS8-3 Improved Coronal Alignment Using the Preemptive Joint Line Convergence Angle Compensation Method in Medial Open Wedge High Tibial Osteotomy: A Retrospective Propensity Score-Matched Analysis**  
Ewha Womans University, Korea Junwoo Byun
- OS8-4 Effect of Joint-Line Obliquity on OA Progression after OWHTO**  
Marunouchi Hospital, Japan Keiji Tensho
- OS8-5 Tibial morphological variations reveal medial proximal tibial angle discrepancies in Japanese patients: three-type classification for high tibial osteotomy**  
Department of Radiological Technology, Kanazawa Munehiro Hospital, Japan Etsuko Tabata
- OS8-6 Investigation of Target Alignment in High Tibial Osteotomy According to the Severity of Osteoarthritis**  
Tokyo Women's Medical University, Japan Junya Itou

## Oral Presentation 9

11:46-12:16 [RoomB]

### AKO coronal alignment 2

[ Chairperson ] **Moritaka Maruyama**  
**In Yong**

(Iwate Medical University, Japan)

(Seoul St. Mary's Hospital, The Catholic University, Korea)

- OS9-1 Supine teleradiogram provides the most accurate preoperative planning for opening-wedge high tibial osteotomy: A comparative analysis of standing, supine, and supine valgus-stress imaging**  
Seoul National University College of Medicine, Seoul, Korea Geunwu Gimm
- OS9-2 Predicting the Correction Angle in Medial Open-Wedge High Tibial Osteotomies: The Role of Preoperative Medial Proximal Tibial Angle**  
1) International Ph.D. Program in Medicine, College of Medicine, Taipei Medical University, Taipei, Taiwan  
2) Department of Orthopedic and Plastic Surgery, Hue Central Hospital, Hue City, Vietnam Thanh Sang Nguyen
- OS9-3 Three-dimensional dynamic alignment analysis during gait following high tibial osteotomy using a 3D gait and alignment measurement system**  
Department of Orthopaedic Surgery, Niigata University Graduate School of Medical and Dental Sciences, Niigata, Japan Yutaka Fujita
- OS9-4 Evaluation of the indication and postoperative optimal alignment of opening-wedge high tibial osteotomy by preoperative joint line convergence angle**  
1) Department of Orthopedic Surgery, Hirosaki General Medical Center, Japan  
2) Department of Orthopedic Surgery, Hirosaki University Graduate School of Medicine, Japan Takahiro Tsushima
- OS9-5 Detection of Lateral Hinge Fractures After Medial Closing Wedge Distal Femoral Osteotomy: Computed Tomography Versus Plain Radiography**  
Department of Orthopedic Surgery, Korea University Ansan Hospital, Korea University College of Medicine, Korea Hyung Jun Park

[ Chairperson ] **Masami Tokunaga** (Fukuoka Orthopaedic Hospital, Japan)

**LS2 Analysis of whole limb alignment using hip-to-calcaneus radiograph**

St. Marianna University School of Medicine, Japan

Naoki Haraguchi

*Sponserd:AUSPICIOUS Corp.*

**Oral Presentation 10**

**13:20-13:56 [RoomB]**

**AKO operative technique**

[ Chairperson ] **Yukio Akasaki**  
**Yuzo Yamada**

(Kyushu University Hospital, Japan)  
(Yao municipal hospital, Japan)

**OS10-1 Biomechanical Evaluation of a Newly Designed Locking Plate for Opening-Wedge High Tibial Osteotomy: Stress Around D-hole in the Presence of Lateral Hinge Fracture**

Department of Orthopedic Surgery, Korea University Ansan Hospital, Korea University  
College of Medicine, Korea

Hyung Jun Park

**OS10-2 Patient-Specific Instrumentation for Medial Open Wedge High Tibial Osteotomy Results in High Accuracy of Correction and Cartilage Regeneration: A Second Look Arthroscopy Study**

1) International Ph.D. Program in Medicine, College of Medicine, Taipei Medical University,  
Taipei, Taiwan  
2) Department of Orthopedic and Plastic Surgery, Hue Central Hospital, Hue City, Vietnam

Thanh Sang Nguyen

**OS10-3 Anterior popliteus transtibial tuberosity osteotomy: a novel technique for knee osteoarthritis**

The Affiliated Hospital of Guizhou Medical University, China

Chuan Ye

**OS10-4 Clinical Significance of an Additional Crossed Screw in Medial Opening-Wedge High Tibial Osteotomy**

Department of Orthopedic Surgery, Division of Vital Care and Reconstructive Medicine,  
Osaka Medical and Pharmaceutical University, Japan

Chuji Hirota

**OS10-5 Mid-term Results of ACL Reconstruction Combined with Medial Wedge-Opening High Tibial Osteotomy (OWHTO) for Post-Traumatic Osteoarthritis following ACL injury**

Koshigaya Municipal Hospital, Department of Orthopaedic Surgery, Japan

Hiroki Ueda

**OS10-6 Uniplanar Open Wedge High Tibial Osteotomy : Surgical Techniques**

Department of Orthopedic Surgery, W Hospital, Daegu, Korea

Sungjung Kim

**Oral Presentation 11**

14:00-14:18 [RoomB]

**AKO infection**[ Chairperson ] **Tetsuro Ishimatsu**  
**Jia-Lin Wu**(Fukuoka University, Japan)  
(Taipei Medical University Hospital, Taiwan)

- OS11-1 Infection Risk Following Medial Open-Wedge High Tibial Osteotomy: Does the Type of Artificial Bone Graft Matter?**  
Linkou Chang Gung Memorial Hospital, Taiwan Shiny Chih-Hsuan Wu
- OS11-2 Olanexidine gluconate versus povidone-iodine for the prevention of surgical-site infection in osteotomy around the knee: a retrospective study**  
Department of Orthopaedic Surgery, Nishinomiya Kaisei Hospital, Japan Hiroki Miya
- OS11-3 One-Year Outcome of Postoperative Infection after Knee Osteotomy**  
Department of Orthopaedic Surgery, Yaeseikai Doujin Hospital, Japan Yukiko Shinohara

**Oral Presentation 12**

14:18-14:54 [RoomB]

**AKO Union**[ Chairperson ] **Yuji Arai**  
**Yoo Jae Doo**(Kyoto Prefectural University of Medicine, Japan)  
(Ewha Womans University, Mokdong Hospital, Seoul, Korea)

- OS12-1 Gap Volume Based on CT Measurement Is a Strong Risk Factor for Delayed Gap Healing After OWHTO**  
Kyoto University, Japan Sayako Sakai
- OS12-2 Trial to Promote Bone Healing by Highly Osteoinductive Artificial Bone in MOWDTO.**  
Hiramatsu Orthopedic Clinic Namba Knee & Sports Clinic, Japan Kunihiko Hiramatsu
- OS12-3 Bicortical Distal Screw Fixation Enhances Union and Reduces Correction Loss in Medial Open-Wedge High Tibial Osteotomy**  
Tokyo Women's Medical University, Japan Shunya Otnai
- OS12-4 Early Completion of Radiographic Bone Union with Rare Complications After Inverted V-shaped HTO Fixed with a Locking Compression Plate**  
Department of Orthopaedic Surgery, Tomakomai Nisshou Hospital, Tomakomai, Japan Koji Yabuuchi
- OS12-5 Optimized Additional Screw Technique to Enhance Early Bone Union in Hybrid Closed-Wedge High Tibial Osteotomy: A Retrospective Comparative Study**  
Department of Orthopaedic Surgery, Fukuyama City Hospital, Hiroshima, Japan Yukimasa Okada
- OS12-6 Risk Factors for Delayed Bone Union After OWHTO**  
Osaka Medical and Pharmaceutical University, Japan Kuniaki Ikeda

**Meniscus Function Reconstruction: Surgical Innovations**

[ Chairperson ] **Ken Nakata** (Department of Health and Sport Sciences, Graduate School of Medicine, Osaka University, Japan)

**Hyuk Soo Han** (Seoul National University Hospital, Korea)

**AS2-1** **New surgical technique to reinforce the function of the meniscus -Meniscal circumferential fiber augmentation-**

Dept. of Orthopaedic sports medicin, JCHO Osaka Hospital, Japan

Keisuke Kita

**AS2-2** **Dual-Tunnel Pullout Repair for medial meniscus posterior root tear: Unpublished Insights and Common Pitfalls**

Okayama University hospital, Japan

Yuki Okazaki

*Sponserd:Stryker Japan*

**Oral Presentation 13**

**UKA & TKA**

[ Chairperson ] **Yuji Yamamoto**  
**Choi Nam Hong**

(Hakodate Municipal Hospital, Japan)  
(Eulji Medical Center, Seoul, Korea)

**OS13-1** **Effect of MOWHTO Versus UKA on Mental Health: A comparative study with propensity score matched analysis**

Singapore General Hospital, Singapore

Ashton Tan

**OS13-2** **An Extended-Release Sebacoyl Dinalbuphine Ester for Perioperative Pain Management in Improving Enhanced Recovery After Surgery in Total Knee Arthroplasty**

Department of General Medicine, Wan Fang Hospital, Taipei Medical University, Taipei, Taiwan

Ching Lu

**OS13-3** **Analysis of factors affecting conversion to total knee arthroplasty after open wedge high tibial osteotomy**

Department of Orthopaedic Surgery, Kyoto Prefectural University of Medicine, Kyoto, Japan

Yuta Fujii

**OS13-4** **Temporal Changes in Joint Awareness After Medial UKA and Opening-Wedge High Tibial Osteotomy: A Propensity-Matched Comparative Study**

Department of Orthopedic Surgery, Tokyo Women's Medical University, Japan

Masafumi Itoh

**OS13-5** **Evaluating OW-HTO and UKA in patients in their 60s: A comparative analysis**

Department of Orthopaedic Surgery, Faculty of medicine, Fukuoka University, Japan

Akira Maeyama

**OS13-6** **Impact of Preoperative Limb Alignment and Deformity on Postoperative Limb Alignment in Unicompartmental Knee Arthroplasty**

Department of Orthopaedic Surgery, Osaka Medical and Pharmaceutical University, Japan

Takashi Ishitani

**Oral Presentation 14**

16:40-17:16 [RoomB]

**DFO and OW PF joint 1**[ Chairperson ] **Kenichi Goshima**  
**Kim Sung Jung**(Kanazawa Munehiro Hospital, Japan)  
(W hospital Daegue, Korea)**OS14-1 Alignment changes after open-wedge high tibial osteotomy result in oloading in the patellofemoral joint: a SPECT/CT analysis**Department of Orthopaedics Surgery, Gil Medical Center, Gachon University College of  
Medicine, Incheon, Korea

Jae Ang Sim

**OS14-2 Medial Closed Wedge Distal Femoral Osteotomy for Osteonecrosis of the Lateral Femoral Condyle with Valgus Deformity: A Case Series**

Department of Orthopaedic Surgery School of Medicine Iwate Medical University, Japan

Moritaka Maruyama

**OS14-3 A Case of Femoral Fracture after Implant Removal Following Distal Femoral Osteotomy**

Sapporo Medical University Hospital, Japan

Maika Yamamoto

**OS14-4 Anterior-Posterior Hinge Width and Hinge Fracture Predict Delayed Union after Medial Closed-Wedge Distal Femoral Osteotomy**

Akiyama Clinic, Japan

Kei Osano

**OS14-5 The influence of hinge width ratio on risk of intraoperative hinge fracture in MCWDFO: A finite element analysis**

Department of Orthopaedic Surgery, Kobe University Graduate School of Medicine, Japan

Atsuki Tanaka

**OS14-6 Intra-articular Injection of Mesenchymal Stem Cells After High Tibial Osteotomy in Osteoarthritic Knee: Two-Year Follow-up of Randomized Control Trial**

Kyung Hee Universtiy Hospital at Gangdong, Korea

Hyobeom Lee

**Oral Presentation 15**

17:20-17:44 [RoomB]

**DFO and OW PF joint 2**[ Chairperson ] **Satomi Abe**  
**Sohn Oog Jin**(Asahikawa Medical University, Japan)  
(Yeungnam University, Daegu, Korea)**OS15-1 Optimizing Plate Position for Biomechanical Stability in Medial Closing-Wedge Distal Femoral Osteotomy**Department of Orthopedic Surgery, Gangnam Severance Hospital, Yonsei University  
College of Medicine, Seoul, Korea

Hyun-Soo Moon

**OS15-2 Differences in Lower Limb Mechanical Axis Between Supine and Standing Positions Before and After Medial Closed-Wedge Distal Femoral Osteotomy**Department of Orthopedic Surgery, Kobe University Graduate School of Medicine,  
Kobe, Japan

Ryota Shimozono

**OS15-3 Preoperative Predictors of Patellofemoral Osteoarthritis Progression After Open-Wedge High Tibial Osteotomy: A Retrospective Cohort Study**

Yao Municipal Hospital, Japan

Yuzo Yamada

**OS15-4 Comprehensive Realignment through Medio-Antero-Distal Tibial Tuberosity Osteotomy (MADD) for Multifactorial Patellar Instability**

Nara Medical University, Department of Sports Medicine, Japan

Munehiro Ogawa

**Case Study Discussion****18:30-19:00 [DejimaWharf]**[ Chairperson ] **Akihiko Yonekura**

(Nagasaki University Hospital, Japan)

**CS-1**

Sana Klinikum Lichtenfels, Germany

Jörg Harrer

**CS-2**

Murup Hospital, Korea

Woon Hwa Jung

**CS-3**

Daegu Fatima Hospital, Korea

Han Jae Hwi



# DAY2 February 1(Sun.)

## DEJIMA Seminar

8:30-9:30 [RoomA]

### Breaking New Ground in Knee Osteoarthritis: Next-Generation Approaches in Osteotomy and Alignment

[ Chairperson ] **Norimasa Nakamura** (Osaka Health Science University, Japan)

**Nobuo Adachi** (Department of Orthopaedic Surgery, Graduate School of Biomedical and Health Sciences, Hiroshima University, Japan)

#### DS-1 Pitfalls and Technical Tips in Around Knee Osteotomy Learned from Early Experience

Yokohama Minami Kyosai Hospital, Japan

Shu Takagawa

#### DS-2 Early stage knee osteoarthritis and medial meniscus extrusion- treatment according to lower limb alignment

Department of Orthopaedics, Juntendo University, Faculty of Medicine, Japan

Mitsuaki Kubota

*Sponserd: CellSeed Inc.*

## Symposium ②

9:30-11:10 [RoomA]

### Knee osteotomy technique master session

[ Chairperson ] **Takenori Akiyama**

(Akiyama Clinic, Japan)

**Jörg Harrer**

(Sana Klinikum Lichtenfels, Germany)

#### SY2-1 Knack and Pitfalls of Hybrid closed wedge high tibial osteotomy (HCWHTO)

Department of joint surgery, Mikiyukai regenerative medicine center  
/ Department of orthopedic surgery, Nara Medical University, Japan

Yasuaki Tohma

#### SY2-2 Distal femoral osteotomy for valgus knees

Meiwa Hospital, Japan

Takehiko Matsushita

#### SY2-3 Indications, surgical technique, and clinical outcomes of tibial condylar valgus osteotomy

Nagasaki University Hospital, Japan

Yusuke Nakazoe

#### SY2-4 Next-Generation Osteotomies around the knee and Elmslie Trillat Procedure-Like OWDTO

Department of Orthopaedic Surgery, Gifu University Graduate School of Medicine,  
Japan

Hiroyasu Ogawa

#### SY2-5 Opposite Lag Screw as an Adjunct in High Tibial Osteotomy with Lateral Hinge Fracture: Improved Union and Correction Maintenance.

Taipei Veterans General Hospital, Taipei, Taiwan

Jesse Chieh-Szu, Yang

#### SY2-6 Hyaline-Like Cartilage Regeneration after High Tibial Osteotomy with Microfracture and BMAC in Advanced Knee Osteoarthritis: A Prospective Clinical Study

Chung Shan Medical University, Taiwan

Chien Sheng Lo

**AKO and cartilage 1**

[ Chairperson ] **Ken Kumagai**  
**Tomoki Ohori**

(Yokohama City University Medical Center)  
(The University of Osaka)

- OS16-1 The Presence or Absence of Cartilage Regeneration Following Medial Open-Wedge High Tibial Osteotomy Does Not Predict Long-term Outcomes**  
Hallym University Sacred Heart Hospital Jun-Ho Kim
- OS16-2 Arthroscopic Microdrilling for Full-thickness Trochlear Cartilage Defects in Patients Undergoing High Tibial Osteotomy Confers Improved Cartilage Status at 1 year and Rate of Minimal Clinically Important Difference at Short-term Follow-up.**  
Severance Hospital, Yonsei University College of Medicine Se-Han Jung
- OS16-3 Adding Cartilage Repair to High Tibial Osteotomy Does Not Improve 10-Year Clinical Outcomes: A Comparative Study of HTO Alone, with Micro-Drilling, and with OATS**  
Kamineni Hospital, India Saipramod Yadlapalli
- OS16-4 Mid-Term MRI Assessment of Meniscal and Cartilage Changes After Medial Opening-Wedge High Tibial Osteotomy**  
Asahikawa Medical University, Japan Satomi Abe
- OS16-5 Combined autologous chondrocyte implantation and high tibial osteotomy for large cartilage lesions in elderly patients with spontaneous osteonecrosis of the knee**  
Department of Orthopaedic Surgery, Graduate School of Medicine, Yokohama City University, Japan Ken Kumagai

**AKO and cartilage 2**

[ Chairperson ] **Tomoki Ohori**  
**Kim Sung Hwan**

(The University of Osaka, Japan)  
(Severance Hospital, Yonsei University Seoul, Korea)

- OS17-1 Treatment of osteoarthritic knee with high tibial osteotomy and allogeneic human umbilical cord blood-derived mesenchymal stem cells combined with hyaluronate hydrogel composite**  
The Catholic University of Korea, Korea Seok Jung Kim
- OS17-2 Long-term outcomes after autologous chondrocyte cell-sheet transplantation combined with high tibial osteotomy for osteoarthritis of the knee**  
Tokai University School of Medicine, Department of Orthopaedic Surgery, Surgical Science, Japan Kosuke Hamahashi
- OS17-3 Incidence and Clinical Significance of Cartilage Hypertrophy After Costal Chondrocyte-Derived Pellet-Type Autologous Chondrocyte Implantation: A Preliminary MRI-Based Study**  
Severance Hospital, Yonsei University College of Medicine, Korea jusung lee
- OS17-4 Changes in MRI Findings Following High Tibial Osteotomy in Patients with Knee Osteoarthritis**  
Department of Orthopaedic Surgery, Kochi Medical School, Japan Syo Deguchi
- OS17-5 Mid-term Clinical Outcomes of Around the Knee Osteotomy with Iliac Bone Grafting for Large Osteochondral Defect in the Weight-Bearing Region**  
Department of Orthopaedic Surgery, Tokyo Teishin Hospital, Japan Tomofumi Kage

**Hinge fracture and ankle**

[ Chairperson ] **Shinichi Kuriyama** (Kyoto University, Japan)  
**Lee Kong Hwee** (Singapore Health Services, Singapore General Hospital, Singapore)

<b>OS18-1</b>	<b>Obesity does not negatively impact early clinical outcomes of medial opening high tibial osteotomy in the Asian Population</b>	Singapore General Hospital, Singapore	Don Koh
<b>OS18-2</b>	<b>Optimizing Lateral Hinge Stability in Medial Open-Wedge High Tibial Osteotomy: The Role of Hinge Hole and Protective K-Wire</b>	Department of Education, Chang Gung Memorial Hospital Linkou, Taoyuan City, Taiwan /College of Medicine, Chang Gung University, Taoyuan, Taiwan	En-Chia Mai
<b>OS18-3</b>	<b>Risk and Protective Factors for Loss of Correction in Patients with Lateral Hinge Fracture After Medial Opening-Wedge High Tibial Osteotomy</b>	Department of Orthopedics and Traumatology, Taipei Veterans General Hospital, Taipei, Taiwan	Jian-Jiun Chen
<b>OS18-4</b>	<b>Underestimated incidence of acute lateral hinge fractures in medial opening wedge high tibial osteotomy: The role of MRI in early detection</b>	Konaseema Institute of Medical Sciences and Research Foundation, Amalapuram, Andhra Pradesh (State) India	BALABADRA SURYAMANIKANTA
<b>OS18-5</b>	<b>MRI-Based Classification of Lateral Hinge Fractures: A Timely Necessity</b>	BJ Government Medical College, India	Minish Katkar
<b>OS18-6</b>	<b>Distal Tibial Oblique Osteotomy for Stage 4 Ankle Osteoarthritis</b>	Department of Orthopaedic Surgery, Japanese Red Cross Nagasaki Genbaku Hospital, Japan	Shota Harada
<b>OS18-7</b>	<b>Distal Tibial Oblique Osteotomy (DTOO) : Surgical technique and clinical varus ankle osteoarthritis</b>	Sasebo City General Hospital, Department of Orthopedic Surgery, Japan	Yoshimasa Teramoto

**DTO**

[ Chairperson ] **Hiroyasu Ogawa** (Gifu University Graduate School of Medicine)  
**Yoo Jae Doo** (Ewha Womans University, Mokdong Hospital, Seoul, )

<b>OS19-1</b>	<b>Open wedge proximal tibial osteotomy with tibial tubercle osteotomy for severe varus deformity of tibia</b>	Yokohama Sekishinkai hospital, Japan	Naoki Yamada
<b>OS19-2</b>	<b>Cancellous Autograft Transfer from Screw-hole (CATS) to the opening gap for early bone healing in Interlocking OW-DTO — A novel, previously unrecognized donor-source</b>	Kyushu University Hospital, Japan	Yukio Akasaki
<b>OS19-3</b>	<b>Evaluation of Bone Union after Open-Wedge Distal Tibial Tubercle Osteotomy Using a Newly Designed Plate</b>	Department of Orthopedic Surgery, Gifu University Graduate School of Medicine, Japan	Yutaka Nakamura
<b>OS19-4</b>	<b>Takeuchi type1 lateral hinge fractures delay gap filling after Distal Tuberosity arc Osteotomy:A Tomosynthesis study</b>	Matsumoto Medical Center, Japan	Kosuke Fukuzawa

## Oral Presentation 20

8:54-9:30 [RoomB]

### DLO

[ Chairperson ] **Keiji Tensho** (Marunouchi Hospital , Japan)  
**Jung Woon Hwa** (Murup Hospital, Masan, Korea)

#### OS20-1 Long-term Comparison of Opening Wedge High Tibial Osteotomy and Double Level Osteotomy for Large Varus Knee Deformities: A Retrospective Cohort Study of Functional Outcomes, Complications, and Survival Rates

Anil Neerukonda Hospital, NRI Institute of Medical Sciences, Visakhapatnam, Andhra Pradesh, India Hari Kishore

#### OS20-2 Comparison of surgical accuracy in double level osteotomy based on the use of intraoperative alignment rods

Department of Orthopaedic Surgery, Yokohama City University, Japan Kei Takahashi

#### OS20-3 Radiological evaluation of ankle alignment change after double level osteotomy for varus knee osteoarthritis

Department of Orthopaedic Surgery, Yokohama City University, Japan Kohei Hamasaki

#### OS20-4 Clinical Outcomes of Double Level Osteotomy (DLO) in Our Institution

Japan Kokan Fukuyama Hospital, Japan Masayuki Kawabe

#### OS20-5 Mid-term outcomes following double level osteotomy in patients with severe varus deformity and advanced knee osteoarthritis.

Hyogo Medical University, Japan Shintaro Onishi

#### OS20-6 Clinical outcomes of double-level osteotomy combining Hybrid CWHTO and medial open wedge DFO for varus osteoarthritis with extension deficit

Department of Orthopedic Surgery, Sapporo Medical School of Medicine, Japan Yasutoshi Ikeda

## Oral Presentation 21

9:35-10:11 [RoomB]

### Cartilage and anatomy

[ Chairperson ] **Kazunori Shimomura** (Kansai University of Welfare Sciences, Japan)  
**Don Koh** (Singapore General Hospital, Singapore)

#### OS21-1 Superficial MCL Proximal Detachment is an Etiology of Medial Knee Laxity in Osteoarthritis

AIIMS Jodhpur, Rajasthan, India Abbas Bhatia

#### OS21-2 Abnormal Branching of the Anterior Tibial Artery

Department of Orthopaedic Surgery, Yokohama Brain and Spine Center, Japan Takuro Harada

#### OS21-3 Dynamic Positional Changes of Knee Soft Tissues During Flexion and Extension: A Retrospective Open MRI study

Okayama University, Japan Tsubasa Hasegawa

#### OS21-4 Intra-Articular Mesenchymal Stem Cell Injection for Knee Osteoarthritis: A Narrative Review of Clinical and MRI-Based Morphologic Outcomes

1) Department of Rehabilitation, Kansai University of Welfare Sciences, Osaka, Japan.  
 2) Department of Orthopaedic Surgery, Osaka University Graduate School of Medicine, Osaka, Japan. Kazunori Shimomura

#### OS21-5 Correlation Between Plate Selection and Risk of Lateral Neurovascular Bundle Injury in Medial Open Wedge High Tibial Osteotomy

Department of Orthopaedic surgery, Tokyo Women's Medical University, Japan Umuto Kuwashima

#### OS21-6 Magnetic resonance angiography-assisted visualization of blood flow to the bone tunnel wall and the tendon graft into the bone tunnel after posterior cruciate ligament reconstruction

Marutamachi Hospital, Japan Hitoshi Kanamura

**Rehabilitation Strategies for Return to Early Functional and Social Activities**

[ Moderator ] **Ryo Nagashima** (Department of Rehabilitation, Yokohama Sekishinkai Hospital, Japan)  
**Daisuke Fukuhara** (Nipponkoukan Hospital, Japan)

<b>PD2-1</b>	<b>Knee extensor strength in knee osteotomy, particularly open-wedge high tibial osteotomy</b>	Kobe University Graduate School of Health Sciences, Japan	Yuya Ueda
<b>PD2-2</b>	<b>Evaluation of Functional Recovery for Safe Return to Sports Following Knee Osteotomy</b>	Osaka Kaisei Hospital, Japan	Satoshi Higashiyama
<b>PD2-3</b>	<b>Evaluation of Functional Recovery for Safe Return to Sports Following Knee Osteotomy</b>	1).Department of Rehabilitation Medicine, Kinjo university, hakusan, Japan 2).Department of Rehabilitation Medicine, Kanazawa Munehiro Hospital, Kanazawa, Japan	Toshiki Azuma
<b>PD2-4</b>	<b>Efforts to Improve High Tibial Osteotomy Outcomes Through an Interprofessional Collaboration-Based Weight Management Program</b>	Department of Rehabilitation, Harue Hospital, Japan	Ryo Matsugi
<b>PD2-5</b>	<b>Multi-Segment Biomechanical Analysis After High Tibial Osteotomy and Distal Tuberosity Tibial Osteotomy</b>	Department of Rehabilitation, Yokohama Sekishinkai Hospital, Japan	Ryo Nagashima

**Oral Presentation 22**

11:25-11:55 [RoomB]

**Meniscus**

[ Chairperson ] **Mitsuaki Kubota** (Juntendo University, Japan)  
**Chien-Sheng Lo** (Chung Shan Medical University, Taiwan)

<b>OS22-1</b>	<b>Game-Changing Technology for Meniscus Repair: Injectable ChitHCI-DDA tissue adhesive with high adhesive strength and biocompatibility for torn meniscus repair and regeneration</b>	1)Department of Orthopaedics, Taipei Medical University Hospital, Taiwan 2) Department of Orthopedics, School of Medicine, College of Medicine, Taipei Medical University, Taiwan	Jia-Lin Wu
<b>OS22-2</b>	<b>Optimal Target Alignment to Restore Medial Contact Pressure in Medial Meniscus Posterior Root Tears</b>	Fowler Kennedy Sports Medicine Clinic / Okayama University Hospital, Japan	Takaaki Hiranaka
<b>OS22-3</b>	<b>Intra-articular migration of the tibial bone plug during anterior cruciate ligament reconstruction with bone-patellar tendon-bone autograft: a case series</b>	Chung-ju Samsung Orthopaedic Clinic, Chung-ju, South Korea, Korea	Jong-Hyun Kim
<b>OS22-4</b>	<b>A successful application of circumferential fiber augmentation as a proactive prevention of MMPRT in a patient with a positive spreading roots sign.</b>	JCHO Osaka Hospital, Japan	Yuki Noshi
<b>OS22-5</b>	<b>Meniscal centralization anchors inserted at the articular margin are less likely to fail than those inserted at the articular surface</b>	Juntendo University, Japan	Keiichi Yoshida

**Evaluation**

[ Chairperson ] **Katsunari Osawa** (Yokohama Sekishinkai Hospital , Japan)  
**Jesse Chieh-Szu Yang** (Taipei Veterans General Hospital, Taipei, Taiwan )

- OS23-1 Association Between Preoperative Pain Catastrophizing and Postoperative KOOS Scores Following Around-the-Knee Osteotomy**  
 Department of Rehabilitation, Kanazawa Munehiro Hospital, Japan Kayo Oari
- OS23-2 Association Between CPAK (Coronal Plane Alignment of the Knee) Classification and Clinical Outcomes In High Tibial Osteotomy**  
Kagoshima University, Japan Naohiro Uezono
- OS23-3 Evaluation of Prognostic Factors in Open Wedge High Tibial Osteotomy Using Preoperative MRI Findings**  
 The Department of Orthopedic Surgery, Hokkaido University Graduate School of Medicine, Japan Ami Takahashi
- OS23-4 Evaluation of the patient satisfaction with implant removal after open wedge high tibial osteotomy.**  
 Department of Orthopedic Surgery, Fukuoka University Faculty of Medicine, Japan Junya Hara
- OS23-5 Hardware removal after open-wedge high tibial osteotomy improves clinical outcomes and hardware-related complications**  
 Department of Orthopedic Surgery, Shikoku Cancer Center, Japan Haruyoshi Katayama

**Rehabilitation**

[ Chairperson ] **Miho Iwase** (Yokohama Sekishinkai Hospital, Japan)  
**Don Koh** (Singapore General Hospital, Singapore)

- OS24-1 A Multicenter Randomized Controlled Trial for a Novel Digital Therapeutics for Treatment of Patellofemoral Pain, a Dilemma in Orthopedics.**  
EverEx Inc, Seoul, Korea Chan Yoon
- OS24-2 The Effect of Sensor-based Rehabilitation (SR) on Chronic Knee Pain (CKP) outcomes - A Systematic Review and Meta-Analysis (SRMA)**  
Singapore General Hospital, Singapore Tao Xinyu
- OS24-3 Correlation Between Preoperative and Postoperative Quadriceps Strength After Around Knee Osteotomy Combined with Osteochondral Autograft Transplantation**  
 Rehabilitation Department, Kameda General Hospital, Japan Itsuki Tanaka
- OS24-4 Quadriceps Strength Recovery After Around Knee Osteotomy: Comparing 3-Week vs. 8-Week Full Weight-Bearing Protocols**  
 Rehabilitation Department, Kameda General Hospital, Japan Hiroki Yamauchi
- OS24-5 Difficulties of Scrub Nurses in High Tibial Osteotomy**  
 Harue Hospital, Operating room nurse, Japan Yuka Honda