

Asia Pacific Spine Society 7th Annual Meeting 2024 (APSS 2024)

Free Paper Presentations

15 June 2024 (Saturday)

Free paper (1) – Endoscopy

08:50 – 09:50 (Room S221)

Moderators: *Cho Yau Lo (Hong Kong SAR) and Takaki Yoshimizu (Japan)*

Time	Abstract Number	Abstract Presenter (Country / Region)	Abstract Topic
08:50 – 08:54	4	Wongthawat Liawrungrueang (Thailand)	Full endoscopic over-the-top decompression for single-level lumbar spinal stenosis: A single-center experience
08:54 – 08:58	45	Qingpeng Gao (China)	Learning curve for percutaneous endoscopic lumbar discectomy (PELD)
08:58 – 09:02	37	Takaki Yoshimizu (Japan)	Short-term outcomes of biportal endoscopy-assisted extraforaminal interbody fusion
09:02 – 09:06	41	Ishant Gunadala (India)	Ultrasound guidance in lumbar unilateral biportal endoscopy
09:06 – 09:10	61	Seung Deok Sun (South Korea)	Comparative analysis endoscopic L5-S1 foraminotomy vs Biportal endoscopic L5-S1 fusion
09:10 – 09:14	97	Pramod Sudarshan (India)	Results of single level discectomy and decompression by Unilateral Biportal Endoscopy (UBE) – Does it have the potential to become a gold standard technique?
09:14 – 09:18	104	Jae Hung Shin (South Korea)	The Safety of Full Endoscopic spine surgery (Uniportal endoscopy) from the perspective of the amount of infusion fluid and MRI scan
09:18 – 09:22	125	Yu-Hsiang Su (Taiwan)	Surgical and Functional Outcomes of Biportal Posterolateral Endoscopic Lumbar Interbody Fusion via Percutaneous Pedicle Screw Incisional Wounds- a case series
09:22 – 09:26	73	Nantaka Tepasamordej (Thailand)	Feasibility of Endoscopic Lumbar Discectomy in a Remote Government Hospital in Thailand: A Cost-Utility Analysis
09:26 – 09:30	251	Lương Minh Quang (Viet Nam)	Full endoscopic laminectomy – a more minimally invasive and muscle preserving treatment for cervical spondylotic myelopathy: A case series.

Free paper (2) – AIS 1

08:50 – 09:50 (Room S224-225)

Moderators: Graham Shea (Hong Kong SAR) and Hideki Shigematsu (Japan)

Time	Abstract Number	Abstract Presenter (Country / Region)	Abstract Topic
08:50 – 08:54	56	Kwan Tung Teenie Wong (Hong Kong)	Vertebral Body Tethering of Main Thoracic Curve Results in Spontaneous correction in Untethered Proximal Thoracic Cobb and Shoulder Balance: A Three- Dimensional Analysis
08:54 – 08:58	59	Jungwook Lim (South Korea)	Clinical effect of intraoperative use of tranexamic acid in Minimal invasive scoliosis surgery (MISS) in patients with adolescent idiopathic scoliosis
08:58 – 09:02	60	Jungwook Lim (South Korea)	Thoracic Chord Length in Scoliosis using the Ideal Pedicle Entry Point based on Facet Joint: A computed tomography study
09:02 – 09:06	67	Takahiro Kitagawa (Japan)	Pelvic incidence as a predictor of proximal junctional kyphosis in Lenke type 5 adolescent idiopathic scoliosis patients
09:06 – 09:10	71	Kwan Tung Teenie Wong (Hong Kong SAR)	Vertebral Body Tethering Results in Improvement in Coronal Cobb Angle but Deterioration in Axial Rotation, A 3- Dimensional Analysis
09:10 – 09:14	103	Dong-Gune Chang (South Korea)	Long-term Follow-up Rotational Changes After Direct Vertebral Rotation in Adolescent Idiopathic Scoliosis
09:14 – 09:18	127	Glenys Poon (Singapore)	Mid to Long-term Outcomes of Thoracoscopic Anterior Selective Thoracic Fusion in Adolescent Idiopathic Scoliosis (AIS) for in Lenke 1 & 2 curves – a Minimum 2 year Follow-up Review
09:18 – 09:22	141	Sin Ying Lee (Malaysia)	Deriving a Favourable Intraoperative Lowest Instrumented Vertebra (LIV) Tilt Angle using Preoperative Left Supine Side-Bending (LSB) Radiographs For Lenke Type 1 And 2 (Non-AR Curves) Adolescent Idiopathic Scoliosis (AIS) Patients
09:22 – 09:26	147	Siti Mariam Mohamad (Malaysia)	Prediction of the Optimal Upper Instrumented Vertebra (UIV) Tilt Angle based on the Pre-operative Erect Radiograph for Lenke Type 1 and 2 Adolescent Idiopathic Scoliosis (AIS) Patients
09:26 – 09:30	149	Siti Mariam Mohamad (Malaysia)	Postoperative Medial Shoulder, Lateral Shoulder and Neck Imbalance among 120 Lenke 1 and 2 Adolescent Idiopathic Scoliosis (AIS) Patients with a Minimum of 5-Year Follow-Up

Free paper (3) – Tumor & infection

08:50 – 09:50 (Room S226-227)

Moderators: Yat Wa Wong (Hong Kong SAR) and Shanmuganathan Rajasekaran (India)

Time	Abstract Number	Abstract Presenter (Country / Region)	Abstract Topic
08:50 – 08:54	57	Mamer Rosario (Philippines)	Early postoperative outcomes of posterior spinal TB surgeries – a single-institutional prospective analysis of 15 consecutive cases
08:54 – 08:58	58	Mamer Rosario (Philippines)	Awareness of trainees on diagnosing TB spondylitis – an analysis of cross-sectional data among Filipino orthopaedic residents
08:58 – 09:02	62	Junlong Zhong (China)	The Safety and Efficacy of PVCR in Treating Severe Thoracolumbar Pott's Deformity in More Than 5-year Follow-up
09:02 – 09:06	138	Aakash Jain (India)	Defining Surgical Indication for Instability in Spinal Tuberculosis: Validation Analysis of Tuberculosis Spine Instability Score (TSIS)
09:06 – 09:10	168	Qiujiang Li (China)	Adherence of Mycobacterium Tuberculosis on Material Surface of Nano-hydroxyapatite/polyamide 66 Composite and Long-term Results of Clinic Application to Spinal Tuberculosis
09:10 – 09:14	202	Vivek Shankar (India)	Analysis of Midterm Clinical and Functional Outcomes Following Sacrectomy for Primary Malignant Sacral Tumors: A Single Tertiary Care Center Study on Posterior-Only Approach without Reconstruction
09:14 – 09:18	222	Shanmuganathan Rajasekaran (India)	Does the Gut microbiome influence disc health and disease? –the interplay between dysbiosis, pathobionts, and disc inflammation
09:18 – 09:22	223	Shanmuganathan Rajasekaran (India)	An Algorithm for the Posterior Only Surgical Correction of Kyphosis in Thoracic and Thoracolumbar Spinal Tuberculosis
09:22 – 09:26	227	Si Jian Hui (Singapore)	Does intraoperative cell-salvaged autologous blood transfusion in metastatic spine tumour surgery improve long-term clinical outcomes? A prospective clinical study
09:26 – 09:30	228	Si Jian Hui (Singapore)	Implant and construct decision making in metastatic spine tumour surgery

Best Paper Presentation – Basic science

13:20 – 14:20 (Room S221)

Moderators: Daisuke Sakai (Japan) and Ajoy Prasad Shetty Tonse (India)

Time	Abstract Number	Abstract Presenter (Country / Region)	Abstract Topic
13:20 – 13:23	-	Hak Sun Kim (South Korea)	Introduction of ASJ
13:23 – 13:29	220	Karthik Ramachandran (India)	Unraveling Complement Protein C1q Dysregulation: Insights from Plasma and Tissue Proteomics in Degenerative Disc Disease
13:29 – 13:35	26	Prudence WH Cheung (Hong Kong SAR)	Impaired Glycine Neurotransmission Causes Adolescent Idiopathic Scoliosis: A Novel Variant and Functional Pathway
13:35 – 13:41	64	Junlong Zhong (China)	Biomechanical Comparison of Different Instrumentations for Severe Thoracolumbar Pott's Deformity after PVCR: A Finite Element Study
13:41 – 13:47	119	Aman Verma (India)	Can a simple smartphone be a cornerstone in School Health screening program for detecting scoliosis in resource poor developing countries? – Revisiting the “Scoliometer”
13:47 – 13:53	128	Adam Yiu Chung Lau (Hong Kong SAR)	Early prediction of curve progression to surgical threshold in Adolescent Idiopathic Scoliosis with bone microarchitecture phenotyping – a step closer to Precision Medicine
13:53 – 13:59	132	Jiong Hao Jonathan Tan (Singapore)	Deep Learning Model for Automated Detection and Classification of Degenerative Cord Signal Abnormality, Spinal Canal and Neural Foraminal Stenosis on Cervical Spine MRI
13:59 – 14:05	204	Wing Ki Cheung (Hong Kong SAR)	How the curve morphology differs between curve types in patients with Adolescent Idiopathic Scoliosis during brace treatment?
14:05 – 14:11	274	Moxin Zhao (Hong Kong SAR)	Non-Radiative Postural Alignment Assessment: Generating Radiograph Comparable Images with 3D Imaging and Deep Learning

Free paper (4) – Cervical

13:20 – 14:20 (Room S224-225)

Moderators: Paul Koljonen (Hong Kong SAR) and Wen-Tien Wu (Taiwan)

Time	Abstract Number	Abstract Presenter (Country / Region)	Abstract Topic
13:20 – 13:24	176	Xiao Yang (China)	Two-level anterior cervical corpectomy and fusion versus posterior open-door laminoplasty for the treatment of cervical ossification of posterior longitudinal ligament: a comparison of the clinical impact on the occipito-atlantoaxial complex
13:24 – 13:28	178	Zhiqiang Yang (China)	A novel MRI-based Cervical Endplate Bone Quality score independently predicts cage subsidence after Anterior Cervical Discectomy and Fusion
13:28 – 13:32	182	Junhu Li (China)	MRI-based cervical vertebral bone quality score and the quality of paravertebral muscle are novel predictors of the loss of cervical lordosis after open-door laminoplasty.
13:32 – 13:36	185	Junhu Li (China)	Effect of different intraoperative neck positions on postoperative dysphagia after anterior cervical discectomy and fusion: a double-blind, prospective, randomized controlled trial.
13:36 – 13:40	205	Karlen Ka-pui Law (Hong Kong SAR)	A new arena in quantifying functional deficits with the severity of spinal cord compression in Degenerative Cervical Myelopathy
13:40 – 13:44	130	Jose Kreisher Rae Foscablo (Philippines)	Clinical and Radiographic Predictors of Deterioration in Mild Cervical Spondylotic Myelopathy: A Systematic Review
13:44 – 13:48	201	Howard, Hao-wen Chen (Taiwan)	The Meaning and Clinical Application of Facet Fluid Effusion Found on MRI in Patients with Cervical Degenerative Spondylolisthesis
13:48 – 13:52	218	Karthik Ramachandran (India)	Postoperative Analgesic Efficacy of Inter-semispinal Plane Block in Posterior Cervical Laminectomy- A Prospective Randomised Controlled Study
13:52 – 13:56	76	Yasutsugu Yukawa (Japan)	Does anterior surgery provide good surgical outcome for K-line (-) and/or huge (occupying ratio > 50%) ossification of posterior ligament in cervical spine?

Free paper (5) - Cervical and miscellaneous

13:20 – 14:20 (Room S226-227)

Moderators: Chris Tang (Hong Kong SAR) and Kazuya Kitamura (Japan)

Time	Abstract Number	Abstract Presenter (Country / Region)	Abstract Topic
13:20 – 13:24	126	Yasutsugu Yukawa (Japan)	Impact of increased signal intensity of the spinal cord at the vertebral body level in patients with cervical myelopathy
13:24 – 13:28	177	Shuxin Zheng (China)	The novel cervical vertebral bone quality score can independently predict cage subsidence after anterior cervical corpectomy and fusion
13:28 – 13:32	83	Yudha Mathan Sakti (Indonesia)	Evaluation of mRNA Tumor Necrosis Factor Alpha (TNF- α) Level from Nucleus Pulposus, Annulus Fibrosus and Facet Joint Tissue on Degenerative Lumbar Canal Stenosis Patient
13:32 – 13:36	98	Chongyan Wang (Singapore)	Tandem Spinal Stenosis: A 845 Multiracial Asian Patients' Prevalence and Risk Factor Analysis
13:36 – 13:40	241	Zhang Hao (China)	Dynamic CT imaging of the cervical spine in patients with atlantoaxial instability
13:40 – 13:44	242	Zhang Hao (China)	ACDF with cervical uncinectomy for cervical radiculopathy with foraminal stenosis
13:44 – 13:48	150	Shun Heng Tan (Malaysia)	All-Pedicle Construct Selective Thoracic Fusion (STF) in Adolescent Idiopathic Scoliosis (AIS): Clinical and Radiological Outcomes at 5-Year Follow-Up for Lenke 1B, 1C, 2B, and 2C Curves
13:48 – 13:52	213	Yukan Wu (China)	Evaluation of Accuracy of Thoracolumbar Pedicle Screw Placement Assisted by Artificial Intelligence Preoperative Planning
13:52 – 13:56	174	Xiao Yang (China)	Long-term quality of life in patients with severe thoracic ossification of the ligamentum flavum treated with posterior laminectomy: a clinic follow-up study with a mean of 70.8 months.
13:56 – 14:00	148	Mrs. Siti Mariam Mohamad (Malaysia)	Anxiety and Depression, Quality of Life (QOL) and Coping Strategies among Adolescent Idiopathic Scoliosis (AIS) Patients on Bracing

Best Paper Presentation – Clinical

14:20 – 15:20 (Room S221)

Moderators: Dong-Gune Chang (South Korea) and Chris Chan (Malaysia)

Time	Abstract Number	Abstract Presenter (Country / Region)	Abstract Topic
14:20 – 14:26	2	Yuan-Shun Lo (Taiwan)	Predicting Neurologic Complications in Thoracic Three-Column Osteotomy: A Clinical Application of a Novel MRI-Based Classification Approach
14:26 – 14:32	25	Prudence WH Cheung (Hong Kong SAR)	The Proximal Femur Maturity Index is a novel tool to Predict Curve Progression Risk in Patients with Adolescent Idiopathic Scoliosis Undergoing Bracing
14:32 – 14:38	27	Yong Yao Tan (Singapore)	Single position lateral lumbar interbody fusion with navigated percutaneous pedicle screw fixation: Technique modification with resultant resource usage optimisation
14:38 – 14:44	63	Kai Cao (China)	The Risk Factors for Implant Failure after PVCR for Severe Thoracolumbar Pott's Deformity
14:44 – 14:50	80	Ziquan Li (China)	Risk Factors of Surgical Complications for Early-onset Scoliosis (EOS)
14:50 – 14:56	106	Hideki Shigematsu (Japan)	Current Trends in Intraoperative Neurophysiological Monitoring among Asian Countries. An Asia Pacific Spine Society (APSS) Survey.
14:56 – 15:02	179	Junhu Li (China)	The relationship between postoperative proximal junctional kyphosis and MRI-based pedicle bone quality scores in thoracic adolescent idiopathic scoliosis
15:02 – 15:08	208	Victoria Yuk Ting Hui (Hong Kong SAR)	Lateral Plane Fulcrum Bending Radiographs Predicts Postoperative Thoracic Normokyphosis in Adolescent Idiopathic Scoliosis

Free paper (6) - New technology 1

14:20 – 15:20 (Room S224-225)

Moderators: Grace Zhang (Hong Kong SAR) and Wongthawat Liawrungrueang (Thailand)

Time	Abstract Number	Abstract Presenter (Country / Region)	Abstract Topic
14:20 – 14:24	5	Wongthawat Liawrungrueang (Thailand)	Artificial Neural Networks Model Detection for Osteoporotic Vertebral Compression Fracture
14:24 – 14:28	229	Si Jian Hui (Singapore)	Does 3D printing affect material properties of PEEK composites? - A detailed compositional & optimized mechanical analysis of pre and post manufacturing
14:28 – 14:32	100	Nagaraju Honnegowda (India)	To assess role of 3D printed model in pre operation planning and outcome of kyphectomy
14:32 – 14:36	109	Chenxi Yu (Hong Kong SAR)	Learning Powered Axial Vertebral Rotation Analysis for Adolescent Idiopathic Scoliosis: Technology Development and Clinical Validation
14:36 – 14:40	110	Xihe Kuang (Hong Kong SAR)	Deep Learning Driven Rapid Diagnosis System for Pedicle Dysplasia with Preliminary Validation
14:40 – 14:44	133	Jiong Hao Jonathan Tan (Singapore)	Can a deep learning artificial intelligence model lead to earlier diagnosis of high grade metastatic epidural spinal cord compression and reduction in treatment delay?
14:44 – 14:48	225	Nan Meng (Hong Kong SAR)	Radiation-free 3D Spine Curve Synthesis Based on Biplanar Optical Unclothed Back Images for Spine Alignment Analysis
14:48 – 14:52	52	Kihyun Kwon (South Korea)	Are there correlations between surgical timing or weather conditions and early post-spinal fusion surgery Infections? Big data analysis

Free paper (7) - New technology 2

14:20 – 15:20 (Room S226-227)

Moderators: Michael Tse (Hong Kong SAR) and Takaki Yoshimizu (Japan)

Time	Abstract Number	Abstract Presenter (Country / Region)	Abstract Topic
14:20 – 14:24	96	Pramod Sudarshan (India)	Intrathecal nusinersen injection for Spinal muscular atrophy post spinal deformity correction surgery – A technical note
14:24 – 14:28	40	Ryo Mizukoshi (Japan)	Gender Differences in Spinal Mobility During Postural Changes: A Detailed Analysis Using Upright CT
14:28 – 14:32	252	Chun Man Ma (Hong Kong SAR)	Resection of hemivertebra in congenital scoliosis using ultrasonic bone cutter under computerized navigation
14:32 – 14:36	50	Melissa Mae Sanchez (Philippines)	Analyzing Pedicle Morphology of Thoracic and Lumbar Vertebra using Computed Tomographic Measurement among Filipino population in a tertiary hospital
14:36 – 14:40	115	Muhammad Jawad Saleem (Pakistan)	Outcome of Expansion Duraplasty in Transverse Myelitis
14:40 – 14:44	169	Xi Yang (China)	A comparison of anterior reconstruction of spinal defect using nano-hydroxyapatite/polyamide 66 cage and autologous iliac bone for thoracolumbar tuberculosis: a stepwise propensity score matching analysis
14:44 – 14:48	262	Alvin Pun (Australia)	Prone Transposas (PTP) Lateral Lumbar Interbody Fusion (LLIF): Segmental Lordosis and Patient Reported Outcome Measures (PROMS) In Case Series Comparable To Current Literature
14:48 – 14:52	230	Si Jian Hui (Singapore)	Novel material processing printing method for novel PEEK-HA-Mg ₂ SiO ₄ composite material for spine implants
14:52 – 14:56	258	Si Jian Hui (Singapore)	Experience using CFR-PEEK implants in metastatic and primary spine tumour surgery; a single centre experience
14:56 – 15:00	273	Hao Wu (Hong Kong SAR)	Prospective Validation of Multimodal Digital Exercise Therapy for Low Back Pain Management

16 June 2024 (Sunday)

Free paper (8) – Trauma

09:00 – 10:00 (Room S221)

Moderators: *Raymond Wong (Hong Kong SAR) and Abhay Nene (India)*

Time	Abstract Number	Abstract Presenter (Country / Region)	Abstract Topic
09:00 – 09:04	23	Hiroyuki Kitagawa (Japan)	Is traumatic disc injury a local kyphosis risk?
09:04 – 09:08	1	Weera Chaiyamongkol (Thailand)	Surgical management strategies for unstable sacral fractures
09:08 – 09:12	10	Xin Qiu (China)	Single-cell nuclear transcriptome sequencing resolves cellular heterogeneity in a single segmental compression model of chronic spinal cord injury in rabbits
09:12 – 09:16	38	Masatoshi Teraguchi (Japan)	Association between thoracic diffuse idiopathic skeletal hyperostosis and Spinal cord injury without radiographic evidence of trauma.
09:16 – 09:20	39	Masatoshi Teraguchi (Japan)	Non cervical diffuse idiopathic skeletal hyperostosis is a risk factor for severity of cervical spinal cord injury
09:20 – 09:24	44	Romel Estilloro (Philippines)	Influence of Barium Sulfate Contrast Agent in Bone Cement on its Physical and Mechanical Properties in the Vertebra of an Animal Model for the Treatment of Vertebral Compression Fractures
09:24 – 09:28	79	Torphong Bunmaprasert (Thailand)	Factors Associated with Non-Contiguous Spine Fracture in Patients with Traumatic Cervical Spine Injury: a 12-Year Retrospective Study
09:28 – 09:32	165	Mian Huang (Hong Kong SAR)	A GPT-Based Question-and-Answer Chatbot on Osteoporosis and Phantom-Less QCT Bone Mineral Density Measurement System for Osteoporosis
09:32 – 09:36	187	Ganesh Kumar (India)	Single vs Double Index screws in Thoracolumbar Burst Fractures: A Comparative Retrospective study
09:36 – 09:40	261	Wei-chao Li (China)	Clinical efficacy and finite element analysis of a novel hollow pedicle screw combined with kyphoplasty for the treatment of Kummell disease

Free paper (9) – Adult spinal deformity 1

09:00 – 10:00 (Room S224-225)

Moderators: Kenny Yat Hong Kwan (Hong Kong SAR) and Brian Hsu (Australia)

Time	Abstract Number	Abstract Presenter (Country / Region)	Abstract Topic
09:00 – 09:04	203	Kuang-Ting Yeh (Taiwan)	Whole spinal alignment in asymptomatic older women with low bone mass: a focus on global tilt angle
09:04 – 09:08	271	Ganesh Kumar (India)	Assessment of osteoporosis using MRI: Is DEXA ready for retirement?
09:08 – 09:12	33	Keiji Nagata (Japan)	Proximal Junctional Kyphosis in Adult Spinal Deformity Correction Surgery: A New Evaluation Method for Upper UIV Using Comfortable Seated Simple X-Ray Evaluation
09:12 – 09:16	69	Guodong Wang (China)	Erector spinae atrophy correlates with global sagittal imbalance and postoperative proximal junctional kyphosis incidence in lumbar degenerative kyphosis
09:16 – 09:20	14	Young-il Ko (South Korea)	Analysis of risk factors affecting lumbosacral pseudoarthrosis in multi-segmental fusion: a CT-based study
09:20 – 09:24	206	Masao Koda (Japan)	Cast Test: Surgical Outcome Prediction of Thoraco-Lumbar Spine Correction Surgery for Sagittal Vertical Axis (+) Type Dropped Head Syndrome: A Report of Initial 5 Cases
09:24 – 09:28	167	Graham Shea (Hong Kong SAR)	The Long-term Natural History of Degenerative Lumbar Spinal Stenosis
09:28 – 09:32	255	Jerry Chi Yan Ip (Hong Kong SAR)	Predicting the Radiographic Correction of Spondylolisthesis following Oblique Lateral Interbody Fusion (OLIF)

Free paper (10) – AIS 2

09:00 – 10:00 (Room S226-227)

Moderators: Jason Pui Yin Cheung (Hong Kong SAR) and Chee Kidd Chiu (Malaysia)

Time	Abstract Number	Abstract Presenter (Country / Region)	Abstract Topic
09:00 – 09:04	153	Yu Jie Lee (Malaysia)	How useful is WhatsApp in the peri-operative management of Adolescent Idiopathic Scoliosis (AIS) patients
09:04 – 09:08	81	Yudha Mathan Sakti (Indonesia)	Multifactorial Genetic Analysis as A Prospective Predictor of Adolescent Idiopathic Scoliosis Development: Ladybird Homeobox 1 (LBX1) And Estrogen Receptor (ESR) mRNA Expression
09:08 – 09:12	139	Sin Ying Lee (Malaysia)	Statistical Comparison of Two Radiographic Classifications for Adult Idiopathic Scoliosis (AdIS) Patients Based on Supine versus Supine Side-Bending Radiographs
09:12 – 09:16	146	Chun Hong Ngan (Malaysia)	Outcomes of Pregnancy and Childbirth Following Posterior Spinal Fusion in Adolescent Idiopathic Scoliosis: A Retrospective Cohort Study
09:16 – 09:20	156	Yee Wern Evonne Tan (Malaysia)	Predictive value of supine radiographs for postoperative curve correction in Adult Idiopathic Scoliosis (AdIS) patients
09:20 – 09:24	158	Sze Khiong Fam (Malaysia)	Long-Term Functional Outcome, Health-Related Quality of Life (HRQOL), and Sports Participation among Adolescent Idiopathic Scoliosis (AIS) Patients more than 10 years after Posterior Spinal Fusion (PSF) Surgery: A Study of 128 AIS Patients.
09:24 – 09:28	186	Tsunehiko Konomi (Japan)	Clinical outcomes of Coplanar-Hybrid techniques for restoring thoracic kyphosis in patients with idiopathic scoliosis: Synergy between convex uniplanar screws and hybrid constructs on the concave side
09:28 – 09:32	226	Mohd Shahnaz Hasan (Malaysia)	A Retrospective Comparative Study of Single Bolus Versus Bolus Followed by Continuous Infusion with Similar Total Tranexamic Acid Dosage on Surgical Blood Loss in Scoliosis Surgery
09:32 – 09:36	243	Prudence Cheung (Hong Kong SAR)	Back Pain Questionnaire in Adolescent Idiopathic Scoliosis: An Insight into Pain Characteristics and its Relationship with Health-Related Quality of Life
09:36 – 09:40	249	Chun Man Ma (Hong Kong SAR)	The use of novel H-bar in intraoperative assessment of alignment for patients with adolescent idiopathic scoliosis receiving posterior fusion surgery

Free paper (11) – AIS 3

14:30 – 15:40 (Room S221)

Moderators: Chun Man Ma (Hong Kong SAR) and Yudha Matha Sakti (Indonesia)

Time	Abstract Number	Abstract Presenter (Country / Region)	Abstract Topic
14:30 – 14:34	70	Guodong Wang (China)	Clinical and Radiological Outcome of Selective Fusion for Rotatory Olisthesis in Degenerative Lumbar Scoliosis: A retrospective cohort study
14:34 – 14:38	129	Josephine Rebecca Chandren (Malaysia)	Review of the Perioperative Outcomes of 123 Adult Idiopathic Scoliosis (AdIS) Patients underwent Posterior Spinal Fusion (PSF).
14:38 – 14:42	140	Sin Ying Lee (Malaysia)	A Dedicated Spine Team Approach Maintained a Consistent Operating Theatre (OT) Efficiency and Perioperative Outcomes in Posterior Spinal Fusion (PSF) Surgery for Adolescent Idiopathic Scoliosis (AIS) Patients
14:42 – 14:46	143	Saturveithan Chandirasegaran (Malaysia)	Perioperative Outcome of Severe Adolescent Idiopathic Scoliosis (AIS) Patients with Cobb Angle $\geq 100^\circ$: The Feasibility of Single-Stage Posterior Spinal Fusion with Radical Facetectomies.
14:46 – 14:50	144	Saturveithan Chandirasegaran (Malaysia)	A Novel Approach: Utilization of Medial Pedicle Wall Referencing Extra-Pedicular (EP) Screw Insertion Technique in Narrow Dysplastic Pedicles in Adolescent Idiopathic Scoliosis (AIS) Patients.
14:50 – 14:54	145	Saturveithan Chandirasegaran (Malaysia)	The Feasibility of Rapid Recovery Protocol (RRP) in Severe Adolescent Idiopathic Scoliosis (AIS) Patients (Cobb Angle $\geq 90^\circ$) following Posterior Spinal Fusion (PSF).
14:54 – 14:58	151	Kar Jun Lee (Malaysia)	Zonal Differences in distribution of Dysplastic Pedicles in Severe (Cobb Angle $\geq 90^\circ$) Idiopathic Scoliosis (IS): A Computed Tomography Study of 2652 Pedicles using the Zonal Classification
14:58 – 15:02	157	Sze Khiong Fam (Malaysia)	Description of A Novel Proximal Hyperkyphotic Rod Contouring Technique to Redistribute Thoracic Kyphosis among Adolescent Idiopathic Scoliosis (AIS) Patients: A study of 58 Lenke Type 1 and 2 AIS Patients
15:02 – 15:06	160	Wee Jieh Wang (Malaysia)	Comparison between Medial and Lateral Pedicle Wall Thickness in Asian Adolescent Idiopathic Scoliosis (AIS) with Major Thoracic Curves
15:06 – 15:10	163	Woon Theng Heng (Malaysia)	Medial Wall Glide Technique: A Novel Technique for Pedicle Screw Insertion in Non-Dysplastic Pedicles Among Adolescent Idiopathic Scoliosis (AIS) Patients

Free paper (12) – Adult spinal deformity 2

14:30 – 15:40 (Room S224-225)

Moderators: Kam-Kwong Wong (Hong Kong SAR) and Hideki Shigematsu (Japan)

Time	Abstract Number	Abstract Presenter (Country / Region)	Abstract Topic
14:30 – 14:34	253	Si Jian Hui (Singapore)	5-year radiological outcomes between decompression alone and decompression with an interlaminar device for lumbar spinal stenosis
14:34 – 14:38	53	Dong-ho Kang (South Korea)	The fate of pre-existing L5-S1 degeneration following oblique lumbar interbody fusion of L4-L5 and above
14:38 – 14:42	54	Dong-ho Kang (South Korea)	Predicting adequate segmental lordosis correction in lumbar spinal stenosis patients undergoing oblique lumbar interbody fusion: A focus on the discontinuous segment
14:42 – 14:46	171	Qiujiang Li (China)	S1 vertebral bone quality score independently predicts pedicle screw loosening following surgery in patients with adult degenerative scoliosis
14:46 – 14:50	172	Qiujiang Li (China)	MRI-based endplate bone quality score as a predictor of cage subsidence following oblique lumbar interbody fusion
14:50 – 14:54	180	Hideki Shigematsu (Japan)	Survey on the Necessity of Intraoperative Neurophysiological Monitoring for Spinal Cord Surgeries in Asian Countries
14:54 – 14:58	238	Sri Krishna Chaitanya Kondety (India)	Expandable Cages For Transforaminal Lumbar Interbody Fusion- 1 Year Radiological Outcomes Of Lumbar Lordosis, Vertebral Foramen Height, Anterior and Posterior Disc Height

Free paper (13) – Complications

14:30 – 15:40 (Room S226-227)

Moderators: Ka Kin Li (Hong Kong SAR) and Yoshiharu Kawaguchi (Japan)

Time	Abstract Number	Abstract Presenter (Country / Region)	Abstract Topic
14:30 – 14:34	16	Takahiro Mui (Japan)	Which patients do we need to consider augmentation of muscle active potentials regarding MEP monitoring before spine surgery?
14:34 – 14:38	250	Qiuya Li (Hong Kong SAR)	Incidence of Rare Complications during and after Lumbar Spine Surgery in Hong Kong
14:38 – 14:42	51	Pochollo Miguel Rosales (Philippines)	Dural Sealants In Spine Surgery: A Scientometric Analysis
14:42 – 14:46	36	Kihyun Kwon (South Korea)	Analysis of risk factors for persistent postoperative neuropathic pain after surgery in patients with spinal stenosis
14:46 – 14:50	43	Paul Albert Manuel (Philippines)	Outpatient intermittent percutaneous CSF drainage as treatment of CSF leak in spine surgery
14:50 – 14:54	272	Yanzhe Wei (China)	Analysis of Surgical Strategies for Two Cases of Ankylosing Spondylitis Kyphosis Complicated by Anterior Dural Ectasia/Spinal Cord Herniation
14:54 – 14:58	47	Rohit Thaker (India)	Dural tears incidence and it's outcome in Minimally Invasive Spine Surgery (MISS) vs. Open Spine surgery for degenerative lumbar spine pathologies.
14:58 – 15:02	78	Hideyuki Arima (Japan)	Impact of osteoporosis on clinical outcomes after corrective fusion for adult spinal deformity and reoperation rates for mechanical complications
15:02 – 15:06	152	Yu Jie Lee (Malaysia)	Factors associated with Moderate and Severe Pulmonary Impairment (MSPI) in Preoperative Adolescent Idiopathic Scoliosis (AIS) Patients
15:06 – 15:10	219	Karthik Ramachandran (India)	Risk Predictive Score and Cord Morphology Classification for Intraoperative Neuromonitoring Alerts in Kyphosis Surgery