	08:40-09:55	Hidetomi	Terai	Japan
	Faculty Lecture 9-13	Tsung-Jen	Huang	Taiwan
FL9	Current status of intraoperative spinal cord monitoring and its optimization	Takanori	Saito	Japan
FL10	Lateral-anterior lumbar interbody fusion (LaLIF) for lumbar degenerative disease: technical notes, surgical system, and mid-term outcomes	Zhao-Min	Zheng	China
FL11	Minimally invasive anterior corpectomy and reconstruction with an expandable cage with rectangular footplates for osteoporotic vertebral fracture.	Hidetomi	Terai	Japan
FL12	Percutaneous endoscopic transforaminal lumbar interbody fusion: a novel technique- sentinel pinning for protection of exiting root and preservation of facet joint	Yi Hung	Huang	Taiwan
FL13	Treatment of multi-levels Lumbar degeneration using MISS Concept	Darwono A.	Bambang	Indonesia
	10:05-10:25	Kazuhiro	Hasegawa	Japan
	Free Paper 10 Finest Imaging 1	Jian	Wang	China
FP10-1	Usefulness of Simultaneous MR neurography and apparent T2 mapping before microendoscopic surgery to treat patient with radiculopathy due to cervical disc herniation	Yawara	Eguchi	Japan
FP10-2	Minimally invasive treatment assisted by diffusion tensor imaging for lumbar disc herniation with adjacent segmental imaging spinal stenosis	Liu	Lijia	China
FP10-3	Credible preoperative diagnosis of lumbar disc herniation using diffusion tensor imaging and diffusion tensor tractography	Liu	Lijia	China
	10:25-10:45	Shigeto	Ebata	Japan
	Free Paper 11 Finest Imaging 2	Warat	Tassanawipas	Thailand
FP11-1	Diffusion tensor imaging with fiber tracking provides a valuable quantitative and clinical evaluation for compressed lumbosacral nerve roots: a systematic review and meta?analysis	Weishi	Liang	China
FP11-2	Using artificial intelligence to predict delayed union in fresh osteoporotic vertebral fractures on magnetic resonance images	Akito	Yabu	Japan
FP11-3	A Deep Convolutional Neural Network Using MRI: Automated Differentiation between Osteoporotic Vertebral Fracture and Vertebral Compression Fractures Due to Spinal Metastasis	Satoshi	Maki	Japan

	10:50-11:20 PASMISS Seminar 5 co-sponsored by Medtronic Sofamor Danek	Tokumi	Kanemura	Japan
PS5	The State of the Art in Minimally Invasive Spine Procedures using Surgical Synergy	Yoshihisa	Kotani	Japan
	11:20-11:50 PASMISS Seminar 6 co-sponsored by Johnson & Johnson	Seiji	Ohtori	Japan
PS6	Measures to prevent complications for minimally invasive spinal surgeries	Takayuki	Fujiyoshi	Japan
	12:00-12:30 Special Lecture 2	Ken	Ishii	Japan
SL2	Extended reality (XR: VR/AR/MR) for spatial surgical navigation and online telemedicine	Maki	Sugimoto	Japan
	13:00-13:30 Invited Lecture 2 co-sponsored by Kaken Pharmaceutical	Seiji	Ohtori	Japan
IL2	Condoliase chemonucleolysis for lumbar disk herniation: Optimal indication and long term follow-up	Yukihiro	Matsuyama	Japan
	13:30-14:00 PASMISS Seminar 7 co-sponsored by Medtronic Sofamor Danek	Masatsune	Yamagata	Japan
PS7	History of anterior lumbar fusion surgery in Japan, our department, and a view of the future of the surgery	Seiji	Ohtori	Japan
	14:05-14:35	Takanori	Saito	Japan
	Free Paper 12 L-LIF 1	Jae Chul	Lee	Korea
FP12-1	Clinical and radiological evaluation of cage subsidence following oblique lateral lumbar interbody fusion: a large cohort, single-centre retrospective review	Jiancheng	Zeng	China
FP12-2	Minimally Invasive Oblique Lateral Lumbar Interbody Fusion Combined with Anterolateral Screw Fixation for Lumbar Degenerative Disc Disease	Jiancheng	Zeng	China
FP12-3	Three-dimensional Navigation Guided Oblique Lumbar Interbody Fusion (OLIF) Surgery for Lumbar Degeneration Diseases: Preliminary Clinical Application	Hongxun	Sang	China
FP12-4	Is Stand-alone Lateral Lumbar Interbody Fusion superior to Instrumented Lateral Lumbar Interbody Fusion for the treatment of Lumbar Degenerative Disease? A Meta-analysis	Jingwei	Liu	China
FP12-5	Clinical and Radiological Outcomes of Minimally Invasive Oblique Lumbar Interbody Fusion at L5-S1	Hae-Dong	Jang	Korea

	14:35-15:05	Sumihisa	Orita	Japan
	Free Paper 13 L-LIF 2	Shing-Sheng	Wu	Taiwan
FP13-1	Evaluation of the presence and distribution of air on abdominal computed tomography after thoracolumbar LIF and conventional anterolateral surgeries.	Tetsuhiro	Ishikawa	Japan
FP13-2	Risk factors for cage subsidence in minimally invasive lateral corpectomy for osteoporotic vertebral fractures	Toshiaki	Kotani	Japan
FP13-3	Lateral lumbar interbody fusion after reduction using the percutaneous pedicle screw system in the lateral position for Meyerding grade II spondylolisthesis: a preliminary report of a new lumbar reconstruction strategy	Masanari	Takami	Japan
FP13-4	Short segmental fusion with X-CORE® for vertebral pseudarthrosis after osteoporotic vertebral fractures	Ryo	Taiji	Japan
FP13-5	Hounsfield unit values on CT as a predictor for cage subsidence following stand-alone oblique lumbar interbody fusion for the treatment of degenerative lumbar diseases	Jian	Wang	China
	15:05-15:20 PASMISS Seminar 8 co-sponsored by Nuvasive	Tomoaki	Toyone	Japan
PS8	Utility of a computer-assisted rod bending system (Bendini®) in spinal instrumentation surgery	Toru	Funayama	Japan
	15:20-15:35 PASMISS Seminar 9 co-sponsored by Stryker	Yoshiyasu	Arai	Japan
PS9	Utility of New Ultrasonic Aspirator System (Sonopet iQ) in Spine Surgery	Naohiro	Kawamura	Japan
	15:35-16:00 Free Paper 14 Cervical Spine Surgery	Yoichiro Baoshan	Hatta Xu	Japan China
FP14-1	3D printing motion-preserving cervical joint system implantation for treatment of cervical myelopathy: a first case report	Xijing	Не	China
FP14-2	Replantation of spinous process-lamina complex in the treatment of cervical spine tumor: two cases report and literature review	Jiahui	Xu	China
FP14-3	Atlanto-occipital instability associated with revision surgery after C1 laminectomy for a retro-odontoid pseudotumor	Shunji	Tsutsui	Japan
FP14-4	Analysis of the Incidence and Risk factors of Postoperative Delirium in Patients with Degenerative Cervical Myelopathy	Seok Woo	Kim	Korea

	16:10-16:55	Koji	Sato	Japan
	Faculty Lecture 14-16	Zheng	Zhaomin	China
FL14	C7-SVA and PI-LL: Key parameters of the successful surgery for dropped head deformity	Tomoaki	Toyone	Japan
FL15	Efficiency of Long lateral mass screw for cervical spine diseases - Proposal of a new trajectory -	Kazuo	Nakanishi	Japan
FL16	Technical and conceptual review on the L5-S1 Oblique Lateral Interbody Fusion Surgery (OLIF51)	Sumihisa	0rita	Japan
	17:00-17:30	Yasuchika	Aoki	Japan
	Free Paper 15 LBP 1	Naresh	Kumar	Singapore
FP15-1	Influence of preoperative difference in lumbar lordosis between the standing and supine positions on clinical outcomes after single-level mini-open transforaminal lumbar interbody fusion	Shuhei	Ohyama	Japan
FP15-2	The effect of minimally invasive lumbar decompression surgery on sagittal spinopelvic alignment in patients with lumbar spinal stenosis: a 5-year follow up study	Hiromitsu	Toyoda	Japan
FP15-3	Asymptomatic stenosis and factors involved in the new-onset of symptoms after decompression surgery for lumbar spinal stenosis -10-year follow-up-	Kazuyuki	Watanabe	Japan
FP15-4	Administration of N-acetylcysteine results in regression of fibrogenic and inflammatory signals in cells from hypertrophied ligamentum flavum	Hao-Chun	Chuang	Taiwan
FP15-5	Indications and effects of condoliase for the treatment of lumbar disc herniation	Masahiro	Inoue	Japan
	17:30-17:55	Sohei	Ebara	Japan
	Free Paper 16 LBP 2	Ruey Mo	Lin	Taiwan
FP16-1	Low back pain and lumbar degeneration in Japanese professional baseball players	Masatoshi	Morimoto	Japan
FP16-2	Intradiscal and epidural Platelet-Rich Plasma Injection for the treatment of Chronic Discogenic Low Back Pain	En	Song	China
FP16-3	Characteristics and surgical outcomes of patients with recurrent lumbar disc herniation after percutaneous laser disc decompression	Koji	Tamai	Japan
FP16-4	Theoretical strategy for the perioperative management of low back pain with degenerative lumbar disease - Recommendation from the epidemiological study	Hiroshi	Hashizume	Japan
	18:00-18:40	Minori	Kato	Japan
	Free Paper 17 MIS-TLIF	Jae-Sung	Ahn	Korea
FP17-1	Biomechanical feasibility of semi-rigid interspinous stabilization assisted lumbar interbody fusion: A Finite Element Study	Kuo-Yuan	Huang	Taiwan

FP17-2	Results of Groove-entry technique/Hooking screw hybrid instrumentation for osteoporotic vertebral fracture treatment	Ivan	Sekiguchi	Japan
FP17-3	Clinical outcomes after minimally invasive spinal stabilization for metastatic spinal tumor cases	Mitsuhiro	Hashimoto	Japan
FP17-4	Robotic spine surgery in Spine Hybrid OR	Sohei	Ebara	Japan
FP17-5	Percutaneous intravascular retrieval of large cement leakage into right atrium following cement-augmented pedicle screw instrumentation	Shinji	Takahashi	Japan
FP17-6	Comparative analysis of outcomes in minimally invasive TLIF and conventional TLIF	Jae-Young	Hong	Korea
	18:40-19:10	Yukihiro	Nakagawa	Japan
	Free Paper 18 MIS-LF	Huilin	Yang	China
FP18-1	Mini-open approach with posterior lumbar interbody fusion and supplement interspinous process device have good clinical results in low-grade lumbar spondylolisthesis: short-term outcome study	Jiun-Cheng	Shiu	Taiwan
FP18-2	Comparative study of posterior surgery for lumbar degenerative diseases with lateral listhesis and scoliotic disc wedgingminimally invasive posterior decompression vs. transforaminal lumbar interbody fusion-	Minori	Kato	Japan
FP18-3	May the midline lumbar interbody fusion (MIDLIF) prevent the early adjacent segment degeneration? A minimum 3-year follow-up comparative study of MIDLIF in L4/5 with cortical bone trajectory screw versus traditional pedicle screw fixation	Во	Han	China
FP18-4	Good five-year postoperative outcomes after facet fusion using a percutaneous pedicle screw system for degenerative lumbar spondylolisthesis	Tomohiro	Miyashita	Japan
FP18-5	Posterior spinal fixation for thoracolumbar fractures with diffuse idiopathic skeletal hyperostosis using the penetrating endplate screw technique	Takahisa	Hishiya	Japan