

## Special Lecture

October 20

2F Main Hall A

14:30-15:20 **Special Lecture 1**

*Chair: Norihiro Suzuki, Congress Chair; Department of Neurology, Keio University School of Medicine, Japan*

**SL-01-1 Recent advances in the research of Moyamoya disease in Japan**

Susumu Miyamoto  
*Department of Neurosurgery, Kyoto University, Japan*

October 21

2F Main Hall A

13:30-14:30 **Special Lecture 2**

*Chair: Michiyasu Suzuki, Department of Neurosurgery, Yamaguchi University School of Medicine, Japan*

**SL-02-1 Endovascular thrombectomy – patient selection and future directions**

Bruce Campbell  
*Royal Melbourne Hospital, The University of Melbourne, Australia*

## Symposium

October 20

2F Main Hall A

9:00-10:30 **Symposium 1**  
**Epidemiology and secondary prevention**

*Chair: Shotai Kobayashi, Shimane University, Japan*  
*Jae-Kyu Roh, Korean Armed Forces Capital Hospital, Korea*

**SY-01-1 History and future of the Japanese Stroke data bank**

Shotai Kobayashi  
*Shimane University, Japan*

**SY-01-2 Stroke Epidemiology: Global Trend**

Keun-Sik Hong  
*Department of Neurology, Inje University, Korea*

**SY-01-3 Current status of the recurrence of non-cardiogenic strokes and the future prevention of stroke in Japan**

Norihiro Suzuki  
*Department of Neurology, Keio University School of Medicine, Japan*

**SY-01-4 Impacts of comorbidity on outcome and secondary prevention in patients with ischemic stroke**

Hyo-Suk Nam  
*Department of Neurology, Yonsei University, Korea*

**SY-01-5 Non-adherence to stroke preventive medications**

Jinkwon Kim  
*Department of Neurology, Cha University, Korea*

## 2F Main Hall A

### 15:30-17:00 **Symposium 2** **Thrombolysis - unsolved issues**

*Chair: Etsuro Mori, Higher Brain Dysfunctions Studies, Tohoku University School of Medicine, Japan*  
*Kwang Ho Lee, Sungkyunkwan University, Department of Neurology, Korea*

- SY-02-1 Is intravenous thrombolysis necessary before endovascular thrombectomy?**  
Man-Seok Park  
*Department of Neurology, Chonnam National University, Korea*
- SY-02-2 Advantage of low-dose alteplase in the context of additional thrombectomy and population aging**  
Shigeru Nogawa  
*Department of Neurology, Tokai University Hachioji Hospital, Japan*
- SY-02-3 Extension of therapeutic time window**  
Kazunori Toyoda  
*Department of Cerebrovascular Internal Medicine, National Cerebral and Cardiovascular Center Hospital, Japan*
- SY-02-4 Selection of advanced CT analysis for IV thrombolysis**  
Ji-Hoe Heo  
*Department of Neurology, Yonsei University, Korea*
- SY-02-5 Thrombolysis in minor ischemic stroke**  
Kyung-Yul Lee  
*Department of Neurology, Yonsei University, Korea*
- SY-02-6 Newer thrombolytic agents**  
Teruyuki Hirano  
*Kyorin University Stroke Center, Japan*

## 2F Main Hall B

### 15:30-17:00 **Symposium 3** **Remodeling of stroke systems for endovascular thrombectomy**

*Chair: Hiroyuki Kinouchi, Department of Neurosurgery, Yamanashi University, Japan*  
*Jong S. Kim, Ulsan University, Department of Neurology, Korea*

- SY-03-1 Identify the patients who face acute delivery to a comprehensive stroke center by emergency medical service: FACE2AD Scale**  
Hiroshi Yamagami  
*Department of Cranial Nerve Internal Medicine, National Cerebral and Cardiovascular Center Hospital, Japan*
- SY-03-2 Prehospital triage for acuter stroke patients with large vessel occlusion for endovascular therapy**  
Kazumi Kimura  
*Department of Neurology, Nippon Medical College, Japan*
- SY-03-3 National Plan for the Establishment of Stroke Systems of Care in Korea**  
Soo-Joo Lee  
*Department of Neurology, Eulji University, Korea*
- SY-03-4 Stroke Care Organization for Thrombolytic & Endovascular Therapy in Korea**  
Joung-Ho Rha  
*Department of Neurology, Inha University, Korea*
- SY-03-5 How we can deliver more efficient endovascular thrombectomy from the perspective of a standard hospital in Japan**  
Yuki Kamiya  
*Department of Neurology, Showa University, Koto Toyosu Hospital, Japan*

**SY-03-6 Current Status of Recanalization Therapy in Korea and A Proposal for Renovation**  
Hee-Joon Bae  
*Department of Neurology, Seoul National University, Korea*

**October 21**

**2F Main Hall A**

9:00-10:30 **Symposium 4**  
**Novel therapeutic strategy for acute ischemic stroke**

*Chair: Kiyohiro Houkin, Department of Neurosurgery, Hokkaido University, Japan*  
*Byung-Woo Yoon, Seoul National University, Department of Neurology, Korea*

**SY-04-1 Beyond endovascular revascularization in emergent large vessel occlusive stroke: decision-making guided by collateral scenarios**  
Yang-Ha Hwang  
*Department of Neurology, Kyungpook national University, Korea*

**SY-04-2 Therapeutic strategies to attenuate hemorrhagic transformation after tissue plasminogen activator treatment for acute ischemic stroke**  
Takayoshi Shimohata  
*Department of Neurology, Niigata University, Japan*

**SY-04-3 Neuroprotection revisited: Small molecule treatment in acute ischemic stroke**  
Gyeong-Moon Kim  
*Department of Neurology, Sungkyunkwan University, Korea*

**SY-04-4 Phase I clinical trial of intracerebral transplantation using bone marrow stromal cell (BMSC) against acute ischemic stroke (RAINBOW project)**  
Masahito Kawabori  
*Department of Neurosurgery, Hokkaido University, Japan*

**SY-04-5 Acceleration of functional recovery by therapeutic angiogenesis after stroke**  
Akihiko Taguchi  
*Foundation for Biomedical Research and Innovations, Japan*

**SY-04-6 Emerging therapeutic strategy for acute ischemic stroke: beyond revascularization**  
Oh-Young Bang  
*Department of Neurology, Sungkyunkwan University, Korea*

**2F Main Hall B**

9:00-10:30 **Symposium 5**  
**Progress in stroke rehabilitation**

*Chair: Shin-ichi Izumi, Tohoku University Graduate School of Biomedical Engineering, Department of Physical Medicine & Rehabilitation, Japan*  
*Chin-Sang Chung, Sungkyunkwan University, Department of Neurology, Korea*

**SY-05-1 Development of A New Rehabilitation Approach using Hybrid Assistive Limb for Stroke Survivors**  
Tooru Inoue  
*Department of Neurosurgery, Fukuoka University, Japan*

**SY-05-2 Go ahead with next stage ~various applications of rTMS for stroke patients~**  
Masahiro Abo/Nobuyuki Sasaki  
*Department of Rehabilitation, Jikei University, Japan*

**SY-05-3 Restoration of post-stroke upper limb paralysis with BMI neurorehabilitation: From basic neuroscience to clinical application**  
Meigen Liu  
*Department of Rehabilitation, Keio University, Japan*

**SY-05-4 Predicting motor recovery after stroke**  
Nam-Jong Paik  
*Department of Rehabilitation, Seoul National University, Korea*

**SY-05-5 Rehabilitation Robot and Artificial Intelligence for Stroke Rehabilitation**

Min-Ho Chun  
*Department of Rehabilitation, Ulsan University, Korea*

**SY-05-6 Genetic variation and stroke recovery**

Jong-min Lee  
*Department of Rehabilitation, Konkuk University, Korea*

**2F Main Hall A**

14:30-16:00 **Symposium 6**  
**Thrombectomy - future aspects**

*Chair: Kazuo Minematsu, National Cerebral and Cardiovascular Center Hospital, Japan*  
*Byung-Chul Lee, Hallym University, Department of Neurology, Korea*

**SY-06-1 Difficulty in selection of the optimal procedure for endovascular recanalization -What are the features of acute stroke patients treated mainly with intracranial angioplasty instead of thrombectomy? -**

Keisuke Imai  
*Department of Neurology and Stroke Treatment, Kyoto First Red Cross Hospital, Japan*

**SY-06-2 Current status of acute stroke intervention in Japan: from RESCUE-Japan Project**

Shinichi Yoshimura  
*Department of Neurosurgery, Hyogo College of Medicine, Japan*

**SY-06-3 Current Status of Endovascular Treatment for Acute Ischemic Stroke**

Jun Lee  
*Department of Neurology, Yeungnam University, Korea*

**SY-06-4 Neuroprotection as an Adjunct to Mechanical Thrombectomy**

Sung-II Sohn  
*Department of Neurology, Keimyung University, Korea*

**SY-06-5 What is hoped will be learned from using MR images for thrombectomy**

Woo-Keun Seo  
*Department of Neurology, Sungkyunkwan University, Korea*

**Free Paper**

**October 20**

**2F Main Hall A**

10:45-12:15 **Free Paper 1**  
**Disease entity and its mechanisms, Imaging technology**

*Chair: Nobuo Araki, Department of Neurology, Saitama Medical University, Japan*

**FP-01-1 The Bleeding with Antithrombotic Therapy Study 2 (BAT2): Study protocol and demographic characteristics of initial 1000 participants**

Masahito Takagi  
*Department of Cerebrovascular Medicine, National Cerebral and Cardiovascular Center, Suita- Osaka, Japan*

**FP-01-2 The absence of hypertension and the presence of putaminal lesions suggest monogenic diseases among patients with suspected hereditary cerebral small vessel disease**

Masahiro Uemura  
*Department of Neurology, Brain Research Institute, Niigata University, Niigata, Japan*

**FP-01-3 Recently-Uncontrolled Glycemia in Diabetic Patients is Associated with the Severity of Intracranial Atherosclerosis**

Kyung Bok Lee  
*Department of Neurology, Soonchunhyang University, Seoul, Korea*

- FP-01-4 Intracranial arteries may be more tortuous in Koreans than in Whites**  
 Bum Joon Kim  
*Department of Neurology, Kyung Hee University Hospital, Korea*
- FP-01-5 Feasibility of brain temperature imaging using multi-voxel <sup>1</sup>H-MRS in assessing cerebral blood flow and metabolism of the deep cerebral white matter in patients with chronic cerebral ischemia**  
 Takamasa Namba  
*Department of Neurosurgery, Iwate Medical University, Japan*
- FP-01-6 Cerebral microbleeds of 2003 patients with ischemic and hemorrhagic stroke using 3.0T MRI**  
 Tetsuya Abe  
*Department of Neurology, Saitama medical university international medical center, Saitama, Japan*
- FP-01-7 The cell assay of regenerative associated cells may indicate the dysfunction of mononuclear cells with moyamoya disease**  
 Taira Nakayama  
*Department of Neurology, Tokai University, Kanagawa, Japan*
- FP-01-8 Association between outer diameter of atherosclerotic middle cerebral artery and RNF213 c.14576G>A variant (rs112735431)**  
 Hiroki Hongo  
*Department of Neurosurgery, Faculty of Medicine, The University of Tokyo, Tokyo, Japan*

## 2F Main Hall B

### 10:45-12:15 Free Paper 2 Basic science. Rehabilitation

*Chair: Yukihiro Fujii, Department of Neurosurgery, Brain Research Institute, University of Niigata, Japan*

- FP-02-1 Preconditioned microglia by oxygen-glucose deprivation promote functional recovery in ischemic rats**  
 Masato Kanazawa  
*Department of Neurology, Brain Research Institute, Niigata University, Japan*
- FP-02-2 Development of neuroprotective therapy against microcirculatory disturbance during cerebral ischemia reperfusion injury**  
 Takeo Abumiya  
*Department of Neurosurgery, Hokkaido University graduate school of medicine, Sapporo, Hokkaido, Japan*
- FP-02-3 The Role of Neuronal ROCK2 in Ischemic Stroke**  
 Jaeho Bae  
*Massachusetts General Hospital and Harvard Medical School, Charlestown, Massachusetts, USA  
 Department of Biochemistry, Pusan National University, Yangsan, Korea*
- FP-02-4 Predictive Impact of Ability for Basic Movement Scale (ABMSII) on Independent Walking after Stroke: A Cohort Study from the Convalescent Rehabilitation Ward**  
 Shoji Kinoshita  
*Department of Rehabilitation Medicine, The Jikei University School of Medicine, Tokyo, Japan  
 Department of Rehabilitation Medicine, Nishi-Hiroshima Rehabilitation Hospital, Hiroshima, Japan  
 Department of Rehabilitation Medicine, Aomori Shintoshu Hospital, Aomori, Japan*
- FP-02-5 The efficacy of brain machine interface training on functional recovery of shoulder flexion movement in patients with chronic stroke**  
 Takuya Nakamura  
*Department of Rehabilitation Medicine, Keio University School of Medicine, Tokyo, Japan*
- FP-02-6 Development of a novel, weighted, and quantifiable functional scale in the era of neuroendovascular interventions - application of conjoint analysis -**  
 Yasuo Terayama  
*Division of Neurology and Gerontology, Department of Internal Medicine, Iwate Medical University, Morioka, Japan*
- FP-02-7 Poor nutritional status on admission identified by the Nutritional Risk Index is associated with poor short-term outcome in patients with ischemic stroke**  
 Tae Jung Kim  
*Seoul National University Hospital, Korea*

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2F Main Hall A

10:45-12:15 **Free Paper 3**  
**Acute stroke therapy**

*Chair: Shinichi Takahashi, Department of Neurology, Keio University School of Medicine, Japan*

- FP-03-1 Salvaged penumbral volume and clinical improvement after acute stroke thrombolysis**  
Hiroyuki Kawano  
*Department of Stroke and Cerebrovascular Medicine, Kyorin University, Tokyo, Japan*
- FP-03-2 Persistent penumbra and recanalization treatment for acute strokes after 6 hours**  
Beom Joon Kim  
*Department of Neurology and Cerebrovascular Center, Seoul National University Bundang Hospital, Seongnam-si, Korea*
- FP-03-3 Thrombolytic Therapy in Stroke Patients with Active Malignancy: a Propensity Score-matched analysis**  
Jin-Man Jung  
*Department of Neurology, Korea University Ansan Hospital, Ansan, Korea*
- FP-03-4 Preprocedural High-sensitivity C-reactive protein predicts contrast-induced nephropathy after percutaneous cerebrovascular angiography**  
Kwangwook Jo  
*Department of Neurosurgery, Bucheon St. Mary's Hospital, College of Medicine, The Catholic University of Korea, Korea*
- FP-03-5 B-type Natriuretic Peptide as a marker for severe stroke in Acute Ischemic Stroke with Atrial Fibrillation**  
Mi Sun Oh  
*Department of Neurology, Hallym University Sacred Heart Hospital, Anyang, Korea*
- FP-03-6 Acute-phase brain natriuretic peptide as a marker of poor prognosis of ischemic stroke related to atrial fibrillation with preserved ejection fraction**  
Ilsoo Kim  
*Department of Neurology, Korea University Guro Hospital, Korea*
- FP-03-7 Seven day ECG monitor in patients with embolic stroke of undetermined source (ESUS)**  
Sono Toi  
*Department of Neurology, Tokyo Women's Medical University, Tokyo, Japan*

2F Main Hall B

10:45-12:15 **Free Paper 4**  
**CEA/CAS. Cerebral aneurysm**

*Chair: Sadao Suga, Department of Neurosurgery, Tokyo Dental College Ichikawa General Hospital, Japan*

- FP-04-1 Carotid Endarterectomy for Medical Therapy-resistant Symptomatic Low-grade Stenosis**  
Kazumichi Yoshida  
*Department of neurosurgery, Kyoto University, Kyoto, Japan*
- FP-04-2 Residual Stenosis after Carotid Artery Stenting: Effect on Long-term Restenosis and Clinical Outcome**  
Jihoon Kang  
*Department of Neurology, Seoul National University Bundang Hospital, Seongnam, Korea*
- FP-04-3 Outcomes of staged or simple angioplasty in sever carotid artery stenosis at higher stroke risk**  
Fumitaka Yamane  
*Department of Neurosurgery, Teikyo University School of Medicine, Japan*  
*Department of Endovascular Neurosurgery, Saitama Medical University, International Medical Center, Japan*

- FP-04-4 Alternative approaches for endovascular stroke intervention in cases with difficult cervical access**  
 Yusuke Egashira  
*Department of Neurosurgery, Gifu University Graduate School of Medicine, Gifu, Japan*
- FP-04-5 Management strategy and treatment outcomes of unruptured intracranial aneurysms – implications from the UCAS Japan cohort**  
 Akio Morita  
*Department of Neurological Surgery, Nippon Medical School, Tokyo, Japan*
- FP-04-6 Chronological change of the treatment for subarachnoid hemorrhage in elderly patients: a multicenter retrospective study**  
 Hiroaki Murayama  
*Department of Neurosurgery, Interdisciplinary Graduate School of Medicine and Engineering, University of Yamanashi, Chuo, Yamanashi, Japan*
- FP-04-7 Long-acting Statin for Aneurysmal Subarachnoid Hemorrhage: A Randomized, Double-Blind, Placebo-controlled Trial**  
 Masato Naraoka  
*Department of Neurosurgery, University of Hirosaki graduate school of Medicine, Hirosaki, Japan*

## Poster Session

October 20

2F Room 201

13:25-14:25 **Poster Session 1**  
**Basic science 1**

*Chair: Takao Urabe, Department of Neurology, Juntendo University Urayasu Hospital, Japan*

- PS-01-1 Stroke Induces Mesenchymal Stem Cell Migration to Infarcted Brain Areas via CXCR4 and C-Met Signaling**  
 Oh Young Bang  
*Departments of Neurology and Departments of Physical and Rehabilitation Medicine, Samsung Medical Center, Sungkyunkwan University, Seoul, Korea*  
*Samsung Advanced Institute for Health Sciences and Technology, Sungkyunkwan University, Seoul, Korea*
- PS-01-2 Direct Co-culture with Human neuronal stem cell suppresses hemolysate-induced inflammation in Raw 264.7 macrophage cells via ERK pathway**  
 Tae Jung Kim  
*Seoul National University Hospital, Korea*
- PS-01-3 Activatable fluorescence imaging of macrophages in atherosclerotic plaques using iron oxide nanoparticles conjugated with indocyanine green**  
 Hiroyuki Ikeda  
*Department of Neurosurgery, Kyoto University Graduate School of Medicine, Kyoto, Japan*  
*Department of Patho-Functional Bioanalysis, Graduate School of Pharmaceutical Sciences, Kyoto University, Kyoto, Japan*
- PS-01-4 Changes in inflammation- and angiogenesis-associated biomarkers by aspirin in silent brain infarcts**  
 Seong-Ho Koh  
*Department of Neurology, Hanyang University Guri Hospital, Korea*
- PS-01-5 Telmisartan reduces progressive oxidative stress and phosphorylated  $\alpha$ -synuclein accumulation in stroke-resistant spontaneously hypertensive rats**  
 Yusuke Fukui  
*Department of Neurology, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Japan*
- PS-01-6 Neuroprotective effects of dimethyl fumarate on cerebral ischemia-reperfusion injury in mice**  
 Kazushi Minami  
*Department of Neurology, Keio University School of Medicine, Tokyo, Japan*

**PS-01-7** Effects of yokukansan on NO, OH<sup>-</sup> metabolism and ischemic change of hippocampal CA1 during cerebral ischemia and reperfusion in mice

Chika Kitabayashi  
*Neurology, Saitama Medical University, Saitama, Japan*

**2F Room 201**

13:25-14:25 **Poster Session 2**  
**Basic science 2**

*Chair: Manabu Sakaguchi, Department of Neurology, Osaka University Graduate School of Medicine, Japan*

**PS-02-1** The effect of rivaroxaban for mouse embolic stroke model

Masahiro Katsumata  
*Department of Neurology, Keio University school of medicine, Tokyo, Japan*

**PS-02-2** Diameter of fluorescent microspheres determines their distribution throughout the cortical watershed area in mice

Naoki Tsukada  
*Department of Neurology, Keio University School of Medicine, Japan*

**PS-02-3**  $\beta$ 1-integrin–matrix interactions modulate cerebral microvessel endothelial cell tight junction expression and permeability

Yoshikane Izawa  
*Division of Hematology, Department of Medicine, University of Washington School of Medicine, Seattle, Washington, USA*  
*Department of Neurology, Keio University School of Medicine, Tokyo, Japan*

**PS-02-4** The prevalence estimates of HTRA1-associated cerebral small vessel disease

Hiroaki Nozaki  
*Graduate School of Health Sciences, Niigata University, Niigata, Japan*

**PS-02-5** Effects of Pretreatment with Warfarin or Rivaroxaban on Neurovascular Unit Dissociation after Tissue Plasminogen Activator Thrombolysis in Ischemic Rat Brain

Jingwei Shang  
*Department of Neurology, Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama University, Japan*

**PS-02-6** Prediction of outcome in bilateral common carotid artery occlusion rats by intravoxel incoherent motion analysis at 11.7 Tesla

Shunrou Fujiwara  
*Department of Neurosurgery, Iwate Medical University, Iwate, Japan*  
*Open and Transdisciplinary Research Initiative, Osaka University, Suita, Japan*

**PS-02-7** Vascular endothelial function of embolic stroke of undetermined source (ESUS)

Yuka Shirai  
*Department of Neurology, Tokyo Women's Medical University, Tokyo, Japan*

**PS-02-8** Relationship between VerifyNow P2Y<sub>12</sub> assay with regard to cytochrome P450 2C19 polymorphisms and stroke recurrence

Hyeweon Kim  
*Department of Neurology, Sanggye Paik Hospital, Inje University College of Medicine, Seoul, Korea*

**2F Room 201**

13:25-14:25 **Poster Session 3**  
**Epidemiology**

*Chair: Shigeru Fujimoto, Division of Neurology, Department of Medicine, Jichi Medical University, Japan*

**PS-03-1** Comparing intracerebral hemorrhages associated with direct oral anticoagulants or warfarin- J-ASPECT Study-

Ryota Kurogi  
*Department of Neurosurgery, Graduate School of Medical Sciences, Kyushu University, Fukuoka, Japan*



- PS-03-2 Influence of pre-stroke cholinesterase inhibitor treatment on short-term functional outcome in acute ischemic stroke patients with pre-stroke dementia: the Fukuoka Stroke Registry**  
Yoshinobu Wakisaka  
*Department of Medicine and Clinical Science, Graduate School of Medical Sciences, Kyushu University, Fukuoka, Japan*  
*Center for Cohort Studies, Graduate School of Medical Sciences, Kyushu University, Fukuoka, Japan*
- PS-03-3 Incidence of stroke in patients with Alzheimer's disease: 11-year nationwide population-based study**  
Jun Hong Lee  
*Department of Neurology, National Health Insurance Service Ilsan Hospital, Goyang-si, Korea*
- PS-03-4 Trends in antiplatelet therapy for the management of Moyamoya disease: Results of a nationwide survey in Japan**  
Koichi Oki  
*Department of Neurology, Keio University School of Medicine, Tokyo, Japan*
- PS-03-5 Fifteenth-year trends for stroke incidence and symptoms among Japanese men and women: The Circulatory Risk in Communities Study (CIRCS)**  
Mina Hayama-Terada  
*Osaka Center for Cancer and Cardiovascular Disease Prevention, Osaka, Japan*
- PS-03-6 Alcohol consumption and Risk of Hemorrhagic Stroke**  
Tai Hwan Park  
*Department of Neurology, Seoul Medical Center, Seoul, Korea*
- PS-03-7 Stroke registries in the world: A systematic review**  
Shoichiro Sato  
*Department of Cerebrovascular Medicine, National Cerebral and Cardiovascular Center, Suita, Osaka, Japan*
- PS-03-8 Metabolic insult causing re-expression of old stroke (MICROS) presenting as stroke mimics**  
Tomoaki Kameda  
*Department of Neurology, Shin-Oyama City Hospital, Tochigi, Japan*

## 2F Room 201

### 13:25-14:25 **Poster Session 4** **Prognostic factor**

*Chair: Shigeru Nogawa, Department of Neurology, Tokai University Hachioji Hospital, Japan*

- PS-04-1 Prediction of malignant middle cerebral artery infarction using clinical and neuroimaging variables**  
Min-Ju Cha  
*Department of Neurology, Chungbuk National University Hospital, Cheongju, Korea*
- PS-04-2 Analysis of the usefulness of the WORSEN score for predicting the deterioration of acute ischemic stroke**  
Nobukazu Miyamoto  
*Department of Neurology, Juntendo University School of Medicine, Tokyo, Japan*
- PS-04-3 NIHSS and DWI-ASPECTS predict final outcome of acute ischemic stroke patients treated with endovascular thrombectomy after thrombolysis**  
Shigeru Nogawa  
*Department of Neurology, Tokai University Hachioji Hospital, Tokyo, Japan*
- PS-04-4 Early recurrent stroke can happen in acute ischemic stroke patient with atrial fibrillation after intravenous thrombolysis and early start of direct oral anticoagulants (DOACs)**  
Hyung Geun Oh  
*Stroke and Cerebrovascular Center, Department of Neurology, Soonchunhyang University College of Medicine, Soonchunhyang University Cheonan Hospital, Cheonan, Korea*
- PS-04-5 Prediction of stroke outcome with immediate post-thrombolysis magnetic resonance imaging**  
Jaewon Shin  
*Department of Neurology, Samsung Medical Center, Sungkyunkwan University School of Medicine, Seoul, Korea*
- PS-04-6 Neurological improvement during admission is associated with blood viscosity**  
Bum Joon Kim  
*Kyung Hee University, Korea*

**PS-04-7 Thyroid function and early neurological deterioration in patients with acute ischemic stroke**  
Hyung Young Kim  
*Department of Neurology, Hanyang University Hospital, Seoul, Korea*

**PS-04-8 Association between serum calcium concentration and early neurologic deterioration in lacunar stroke**  
Mincheol Park  
*Department of Neurology, Yonsei college of medicine, Seoul, Korea*

**2F Room 201**

13:25-14:25 **Poster Session 5**  
**Intracranial artery stenosis. Cerebral blood flow and metabolism**

*Chair: Jyoji Nakagawara, Integrative Cerebral and Cardiovascular Imaging Center, National Cerebral and Cardiovascular Center, Japan*

**PS-05-1 Correlation of cerebrovascular reserve assessed by acetazolamide-stress SPECT with collaterals on arterial spin-labeling MRI in patients with carotid occlusive disease**  
Hyunkoo Kang  
*Department of Radiology, Seoul Veterans Hospital, Seoul, Korea*

**PS-05-2 Induced hypertensive therapy in acute ischemic stroke patients with hemodynamic instability**  
Inyoung Chung  
*Department of Neurology, Seoul National University Bundang Hospital, Seongnam, Korea*

**PS-05-3 The usefulness of IMZ SPECT in detecting cerebral hyperperfusion syndrome after revascularization surgery for moyamoya disease: A case report**  
Mami Enya  
*Department of Neurosurgery, University of Yamanashi, Yamanashi, Japan*

**PS-05-4 Fluid-Attenuated Inversion Recovery Vascular Hyperintensity indicates decreased regional cerebral blood flow in moyamoya disease**  
Shigeki Nakano  
*Department of neurosurgery, Chiba Cerebral and Cardiovascular Center, Ichihara, Japan*

**PS-05-5 Effect of emergency STA-MCA bypass surgery on the outcome in acute ischemic stroke patients with large artery occlusion and hemodynamic deterioration**  
Jin Soo Kim  
*Department of Neurology, Seoul National University Bundang Hospital, Gyeonggi-do, Korea*

**PS-05-6 Clinical Outcome and Technical Considerations of Aspiration Thrombectomy Using Balloon Guide Catheter for Acute Distal Internal Carotid Artery Occlusion: A Single Center Experience**  
Jeong Jin Park  
*Department of Neurology, Konkuk University Medical Center, Seoul, Korea*

**PS-05-7 The Revised method of Angioplasty with Wingspan stent in Angioplasty for ICAS**  
Kuhyun Yang  
*Department of Neurosurgery, Gangneung Asan Medical Center, University of Ulsan College of Medicine, Korea*

**PS-05-8 Feasibility of permanent stenting with Solitaire FR as a rescue treatment for the reperfusion of acute intracranial artery occlusion**  
Ho Geol Woo  
*Department of Neurology, Seoul National University Bundang Hospital, Seongnam-si, Korea*

13:25-14:25 **Poster Session 6**  
**Acute stroke therapy**

*Chair: Hiroshi Yamagami, Department of Cranial Nerve Internal Medicine, National Cerebral and Cardiovascular Center Hospital, Japan*

- PS-06-1 Stent Retrieval Thrombectomy using Intracranial Support Catheter Advance Technique (CATCH) for Acute Ischemic Stroke**  
Chang-Min Lee  
*Department of Neurology, Dankook University College of Medicine, Cheonan, Korea*
- PS-06-2 Endovascular revascularization in acute large vessel occlusive stroke with mild symptoms: a double-edged sword**  
Ki-Hong Kim  
*Department of Neurology, Kyungpook National University School of Medicine and Hospital, Daegu, Korea*
- PS-06-3 Prognostic Significance of Short-term Blood Pressure Variability after Endovascular Treatment of Acute Ischemic Stroke**  
Sang-Hoon Kim  
*Department of Neurology, Chonnam National University Hospital, Gwangju, Korea*
- PS-06-4 Relationship of systolic blood pressure during 24 hours after thrombolysis to clinical outcome in patients with acute ischemic stroke**  
Takeshi Yoshimoto  
*Department of Neurology, National Cerebral and Cardiovascular Center, Japan  
Department of Stroke and Cerebrovascular Diseases, National Cerebral and Cardiovascular Center, Japan*
- PS-06-5 Off-hour effects on treatment delays and clinical outcomes in endovascular recanalization therapy**  
Jay Chol Choi  
*Department of Neurology, Jeju National University, Jeju, Korea*
- PS-06-6 Smartphone based Pre-Notification System in Acute Stroke: Time Saving Result of Thrombolysis**  
Myeong Jin Son  
*Department of neurology, University of Hallym, Hwaseong, Korea*
- PS-06-7 Clinical characteristics of drip-and-ship thrombolytic treatment for acute ischemic stroke**  
Satoko Mizuno  
*Department of Neurology, Saitama Medical University International Medical Center, Saitama, Japan*
- PS-06-8 Comparison of “Drip, ship & retrieve” thrombectomy and “Mother ship, IV lytics & retrieve” thrombectomy at our hospital**  
Masahiro Katsumata  
*Department of Neurology, Keio University school of medicine, Tokyo, Japan  
Department of Neurosurgery, Showa University Fujigaoka Hospital, Japan*

13:25-14:25 **Poster Session 7**  
**ICH, SAH/Cerebral aneurysm, AVM**

*Chair: Toru Iwama, Department of Neurosurgery, Gifu University Graduate School of Medicine, Japan*

- PS-07-1 Comparison of craniotomy and decompressive craniectomy in supratentorial large volume intracerebral hemorrhage**  
Sang Kyu Park  
*Department of Neurosurgery, Incheon St.Mary's Hospital, Catholic University of Korea, Incheon, Korea*
- PS-07-2 Clinical implications of variability of PaCO<sub>2</sub> in SAH patients**  
Shota Yokoyama  
*Department of Cadrio Renal and Cerebrovascular Medicine, Kagawa University, Kagawa, Japan*

- PS-07-3 Trends of the treatment for cerebral aneurysm in Japan**  
 Sadao Suga  
*Department of Neurosurgery, Tokyo Dental College Ichikawa General Hospital, Ichikawa, Japan*
- PS-07-4 Early coagulation, inflammation and acute brain injury after a subarachnoid hemorrhage**  
 Masaaki Hokari  
*Department of Neurosurgery, Teine Keijinkai Hospital, Japan*
- PS-07-5 Association of plasma D-dimer level with thromboembolic events after endovascular coiling of ruptured cerebral aneurysms**  
 Hitoshi Fukuda  
*Department of Neurosurgery, Kochi University, Kochi, Japan  
 Department of Neurosurgery, Kurashiki Central Hospital, Kurashiki, Japan*
- PS-07-6 Flow dynamics in thin-walled regions of middle cerebral artery aneurysms associated with aneurysm rupture**  
 Tomoaki Suzuki  
*Department of Neurosurgery, Brain Research Institute, Niigata University, Niigata, Japan  
 Department of Neurosurgery, Tachikawa general hospital, Nagaoka, Japan*
- PS-07-7 The long-term outcomes of single-session gamma knife radiosurgery to medium-large arteriovenous malformations**  
 Hiroataka Hasegawa  
*Department of Neurosurgery, The University of Tokyo, Tokyo, Japan*
- PS-07-8 Semi-jail technique for coil embolization with new open-cell stent**  
 Manabu Shirakawa  
*Department of Neurosurgery, Hyogo College of Medicine, Hyogo, Japan*

## 2F Room 201

### 13:25-14:25 **Poster Session 8** **CEA/CAS**

*Chair: Shinichi Yoshimura, Department of Neurosurgery, Hyogo College of Medicine, Japan*

- PS-08-1 Endovascular revascularization of tandem cervical carotid and intracranial occlusions: can emergent carotid stenting be inevitable or not?**  
 Yang-Ha Hwang  
*Department of Neurology, Kyungpook National University School of Medicine and Hospital, Daegu, Korea*
- PS-08-2 Impact of Frailty on mid-term Outcome in Asymptomatic Patient after Carotid Artery Stenting**  
 Hideyuki Ishihara  
*Department of Neurosurgery, Yamaguchi University, Yamaguchi, Japan*
- PS-08-3 Microsurgical Carotid Endarterectomy with Interintimal dissection for Highly Calcified Plaques**  
 Tsutomu Ichinose  
*Department of Neurosurgery, Yao Tokushukai General Hospital, Osaka, Japan*
- PS-08-4 Pretreatment and on-going use of  $\omega$ -3 fatty acids reduces thromboembolic complications and prevents in-stent restenosis in patients undergoing carotid artery stenting**  
 Ichiro Nakagawa  
*Department of Neurosurgery, Nara Medical University, Nara, Japan*
- PS-08-5 Short-term experience of protocol-based treatment decision for carotid artery stenosis**  
 Kyeongyeol Cheon  
*Departments of Neurology, Cerebrovascular center, Gangnam Severance Hospital, Seoul, Korea*
- PS-08-6 How to capture flail as carotid artery stenosis treatment(CEA) decision factor**  
 Masataka Torii  
*Department of Neurosurgery, University of Kyorin, Tokyo, Japan*
- PS-08-7 Carotid artery stenting for the elderly patients**  
 Kazuya Kanemaru  
*Department of Neurosurgery, University of Yamanashi, Yamanashi, Japan*

**PS-08-8 Stroke recurrence in patients with atrial fibrillation undergoing carotid stenting**

Jae Hyuk Kwak

*Department of neurology, University of Keimyung, Daegu, Korea*

**2F Room 201**

13:25-14:25 **Poster Session 9**  
**Imaging technology**

*Chair: Makoto Sasaki, Institute for Biomedical Sciences, Iwate Medical University, Japan*

**PS-09-1 Detection of lenticulostriate artery lesions in patients with acute stroke using high-resolution MRA at 7T**

Haruna Miyazawa

*Department of Neurology and Gerontology, Iwate Medical University, Japan*

**PS-09-2 Clinical and Imaging Characteristics of Internal Border Zone Infarcts involving the Anteromedial Temporal Lobe**

Samyeol Ha

*Department of Neurology, Haeundae Paik Hospital, Inje University College of Medicine, Busan, Korea*

**PS-09-3 Apparent diffusion coefficient reduction might be a predictor of poor outcome in patients with posterior reversible encephalopathy syndrome**

Itaru Ninomiya

*Departments of Neurology, Brain Research Institute, Niigata University, Japan*

**PS-09-4 Acceleration-Selective Arterial Spin Labeling MR Angiography for Evaluation of Cortical Vessels of Main Cerebral Arteries after Revascularization Surgery for Moyamoya Disease**

Ataru Nishimura

*Department of Neurosurgery, Graduate School of Medical Sciences, Kyushu University, Fukuoka, Japan*

**PS-09-5 Assessment of Collateral Circulation in Acute Ischemic Stroke: Simulated 2-phase CTA versus Simulated 3-phase CTA**

Eung Yeop Kim

*Department of Radiology, Gachon University Gil Medical Center, Incheon, Korea*

**PS-09-6 Clinical significance of perfusion weighted MRI in acute lacunar infarction**

Kyoungwon Baik

*Department of Neurology, Gangnam Severance Hospital, Yonsei University College of Medicine, Seoul, Korea*

**PS-09-7 Lesion patterns according to stroke classification using voxel-based lesion pattern analysis**

Jieun Lee

*Department of Neurology, Samsung medical center, Seoul, Korea*

**PS-09-8 Cerebrovascular surgery utilizing high-resolution intraoperative imaging system**

Yasuhiro Yamada

*Department of Neurosurgery, Fujita Health University, Banbuntane Hotokukai Hospital, Nagoya, Japan*

**2F Room 201**

13:25-14:25 **Poster Session 10**  
**Stroke with uncommon cause**

*Chair: Osamu Onodera, Department of Neurology, Clinical Neuroscience Branch, Brain Research Institute, Niigata University, Japan*

**PS-10-1 Spontaneous dissection of the extracranial internal carotid artery: Case report**

Kenzo Koizumi

*Department of Neurology, Ichikawa General Hospital, Tokyo Dental College, Chiba, Japan*

**PS-10-2 A Case of Extracranial Vertebral Artery Dissection Associated with Dynamic Arterial Compression**

Tetsuya Okuhara

*Department of Neurosurgery, University of Yamanashi, Yamanashi, Japan*

- PS-10-3 Clinical features and management strategy of pediatric arteriovenous malformations**  
Soichi Oya  
*Department of Neurosurgery, Saitama Medical Center, Saitama Medical University, Saitama, Japan*
- PS-10-4 Protein S deficiency in young aged stroke**  
Seongheon Kim  
*Department of neurology, Kangwon National University College of Medicine, kangwon-do, Korea*
- PS-10-5 Twelve cases of cerebral infarction caused by Trousseau syndrome**  
Itsuki Hasegawa  
*Department of Neurology, Osaka City University Graduate School of Medicine, Osaka, Japan*
- PS-10-6 Brainstem infarction as the first manifestation of CADASIL**  
Yong Sung Kim  
*Department of Neurology, College of Medicine, Hanyang University, Seoul, Korea*
- PS-10-7 Basilar artery diameter is associated with cerebral small vessel disease and the duration of enzyme-replacement therapy in Fabry disease**  
Kaori Miwa  
*Department of Neurology, Osaka University Graduate School of Medicine, Osaka, Japan*
- PS-10-8 A case of Familial Cerebral Cavernous Malformation Caused by a Novel CCM1/KRIT1 Mutation**  
Seong Hwa Jang  
*Department of neurology, University of keimyung, Daegu, Korea*

## 2F Room 201

### 13:25-14:25 **Poster Session 11** **Anticoagulation, Infection**

*Chair: Teruyuki Hirano, Kyorin University, Stroke Center, Japan*

- PS-11-1 Patterns of stroke recurrence in ischemic stroke patients taking non-vitamin K antagonist oral anticoagulation**  
Ho Geol Woo  
*Department of Neurology, Seoul National University Bundang Hospital, Seongnam-si, Korea*
- PS-11-2 Cerebral microbleeds might be direct bleeding foci in patients with medication of warfarin?**  
Hoyoung Jeon  
*Department of neurology, Chungbuk national university hospital, Cheongju, Korea*
- PS-11-3 Hematoma expansion and clinical outcome of intracerebral hemorrhage with direct oral anticoagulants or Vitamin K antagonist**  
Tatsuo Amano  
*Stroke center of Kyorin University Hospital, Japan*
- PS-11-4 Characteristics of patients developing stroke on NOAC**  
Jong-Moo Park  
*Department of Neurology, Nowon Eulji Medical Center, Eulji University, Seoul, Korea*
- PS-11-5 Four cases of embolic microbleeds; nosologic considerations**  
Akihiro Shindo  
*Department of Neurology, Mie Graduate School of Medicine, Tsu, Mie, Japan*
- PS-11-6 Clinical study of stroke related to infective endocarditis**  
Kazuyuki Iijima  
*Department of Neurology, Tokai Oiso Hospital, Japan*
- PS-11-7 Association of *cnm*-positive *Streptococcus mutans* with deep but not with lobar microbleeds**  
Satoshi Hosoki  
*Department of Neurology, National Cerebral and Cardiovascular Center, Suita, Japan*
- PS-11-8 Clinical importance of susceptibility-weighted MRI in sepsis-associated encephalopathy**  
Seung Jae Kim  
*Department of Neurology, University of Hanyang, Seoul, Korea*

## 2F Room 201

### 13:25-14:25 **Poster Session 12** **Small vessel disease, Cryptogenic stroke, Symptomatology**

*Chair: Shunya Takizawa, Division of Neurology, Department of Internal Medicine, Tokai University School of Medicine, Japan*

- PS-12-1 Lacunar infarct preferentially develops in the side with more severe white matter hyperintensities**  
Sang-Wuk Jeong  
*Department of Neurology, Dongguk University Ilsan Hospital, Goyang, Korea*
- PS-12-2 Association of Echocardiographic Left Ventricular Mass Index with Cerebral White Matter Hyperintensities in Acute Ischemic Stroke**  
Jun Lee  
*Department of Neurology, Yeungnam University Medical Center, Daegu, Korea*
- PS-12-3 The relationship between cerebral microbleeds and severity of chronic kidney diseases in patients with acute ischemic stroke or transient ischemic attack**  
Kana Ueki  
*Department of Cerebrovascular Medicine and Neurology, Clinical Research Institute, National Hospital Organization Kyushu Medical center, Japan*
- PS-12-4 Impact of asymmetric middle cerebral artery velocity on functional recovery in cryptogenic stroke patients**  
Minho Han  
*Department of Neurology, Yonsei University College of Medicine, Seoul, Korea*
- PS-12-5 Treatment of Cryptogenic Stroke with Active Cancer with a New Oral Anticoagulant**  
Chi Kyung Kim  
*Department of Neurology, Korea University Guro Hospital, Korea*
- PS-12-6 Recurrent stroke 12 years after the repair of secundum atrial septal defect**  
Taedong Ok  
*Department of Neurology, Gangnam Severance Hospital, Yonsei University College of Medicine, Seoul, Korea*
- PS-12-7 Clinical symptom and radiological feature with Bilateral vertebral artery occlusion**  
Tsugio Akutsu  
*Department of Neurology, Kitasato University School of Medicine, Kanagawa, Japan*
- PS-12-8 Clinical study of 11 patients with midbrain infarction-induced oculomotor nerve palsy**  
Katsuhiko Ogawa  
*Division of Neurology, Department of Medicine, Nihon University School of Medicine, Tokyo, Japan*

## 2F Room 201

### 13:25-14:25 **Poster Session 13** **Metabolism, Symptomatology**

*Chair: Kazutoshi Nishiyama, Department of Neurology, Kitasato University, Japan*

- PS-13-1 Association between Nontraditional Serum Lipid Variables and Intracranial Atherosclerotic Stenosis**  
Dong Hyun Lee  
*Department of Stroke Neurology, Seonam University Myongji Hospital, Korea*
- PS-13-2 Age-related Metabolomics of Ischemic Stroke**  
Hyun-Soon Jang  
*Department of Neurology, Samsung Medical Center, Sungkyunkwan University School of Medicine, Seoul, Korea*
- PS-13-3 Body fat mass and risk of cerebrovascular lesions: The PRESENT project**  
Seung-Han Suk  
*Department of Neurology, Wonkwang University Sanbon Medical Center, Gyeonggi, Korea*

- PS-13-4 Efficacy of alogliptin (DPP-4 inhibitor) for the secondary prevention after ischemic stroke or TIA with type 2 diabetes mellitus**  
Ryota Tanaka  
*Department of Neurology, Juntendo University, Japan*
- PS-13-5 Frozen medulla oblongata: Skin temperature asymmetry in lower medullary infarction**  
Sang Won Han  
*Department of Neurology, Sanggye Paik Hospital, Inje University College of Medicine, Seoul, Korea*
- PS-13-6 Variation in central positional nystagmus according to the blood flow of vertebral artery**  
Illeok Jung  
*Department of Neurology, Korea University College of Medicine, Korea University Ansan Hospital, Korea*
- PS-13-7 Unilateral ptosis associated with anteromedial thalamic hemorrhage**  
So-Yeon Kwon  
*Department of Neurology, Chungbuk National University Hospital, Cheongju, Korea*
- PS-13-8 Primary Medullary Hemorrhage Presenting with Pseudo-vestibular Neuritis**  
Chang-Min Lee  
*Department of Neurology, Dankook University College of Medicine, Cheonan, Korea*

## 2F Room 201

### 13:25-14:25 **Poster Session 14** **Case reports**

*Chair: Takayoshi Shimohata, Department of Neurology and Geriatrics, Division of Neuroscience, Research Field of Medical Sciences, Gifu University Graduate School of Medicine, Japan*

- PS-14-1 A case of diplopia which well responded to steroid therapy, and followed by development of dural arteriovenous fistula in two years**  
Satoshi Okada  
*Department of Neurology, Ichikawa General Hospital, Tokyo Dental College, Chiba, Japan*
- PS-14-2 The importance of differential diagnosis of mimicking an acute stroke in late onset neuromyelitis optica**  
Hyeyoung Jung  
*Department of Neurology, University of Catholic, Seoul, Korea*
- PS-14-3 Case of subarachnoid hemorrhage during intravenous immunoglobulin treatment in chronic inflammatory demyelinating polyradiculopathy patient**  
Bongje Kim  
*Department of Neurosurgery, SM Christianity Hospital, Pohang, Korea*
- PS-14-4 Trans-sylvian STA-SCA bypass: Procedure Development and Case Reports**  
Tsunenori Ozawa  
*Department of Neurosurgery, Sannocho Hospital, Niigata, Japan*
- PS-14-5 Cerebral artery infarction in a patient with Leriche's syndrome**  
Jee Hyun Kwon  
*Department of Neurology, University of Ulsan, Ulsan, Korea*
- PS-14-6 A 78 year old woman with simultaneous Thrombosis of Vein of Galen Cerebral infarction of vein of Galen**  
Yeongbae Lee  
*Department of Neurology, Gachon University Gil Medical Center, Incheon, Korea*
- PS-14-7 A case of vertebral artery stump syndrome successfully treated with coil embolization**  
Kazunari Homma  
*Division of Neurology, Department of Internal Medicine, Tokai University School of Medicine, Kanagawa, Japan*
- PS-14-8 A juvenile case of Prader-Willi syndrome complicated with cerebral infarction**  
Jun Takeuchi  
*Department of Neurology, Osaka City University Graduate School of Medicine, Osaka, Japan*



13:25-14:25 **Poster Session 15**  
**Rehabilitation**

Chair: Masahiro Abo, *Department of Rehabilitation, Jikei University, Japan*

- PS-15-1** **Assessment of usability and safety of a EEG-BMI neurorehabilitation system developed for post stroke severe finger paralysis**  
Kohei Okuyama  
*Department of Rehabilitation Medicine, Keio University School of Medicine, Tokyo, Japan*
- PS-15-2** **Effects of a Virtual Reality Exercise Program(Wii) on Cognitive Function of Elderly People with Vascular Dementia**  
Geun-Ho Lee  
*Department of Neurology, College of Medicine, Dankook University, Cheonan, Korea*
- PS-15-3** **Test-retest reliability of the Kinect-based Reachable Workspace evaluation in patients with hemiparetic stroke**  
Kohsuke Okada  
*Department of Rehabilitation Medicine, Keio University School of Medicine, Japan*
- PS-15-4** **Role of brain-derived neurotrophic factor in beneficial effects of repetitive transcranial magnetic stimulation for upper limb hemiparesis after stroke**  
Masachika Niimi  
*Department of Rehabilitation Medicine, The Jikei University School of Medicine, Tokyo, Japan*  
*Department of Rehabilitation Medicine, Tokyo General Hospital, Tokyo, Japan*
- PS-15-5** **Effect of recombinant human growth hormone on functional outcome of acute stroke patient**  
Jun Beom Lee  
*Department of Neurology, Hong-Ik hospital, Seoul, Korea*
- PS-15-6** **Development of an intelligent peg sensor system to measure hand grip-and-release functions in patients with stroke.**  
Kengo Tsujimoto  
*Department of Rehabilitation Medicine, University of Keio, Tokyo, Japan*
- PS-15-7** **Action verbal fluency in healthy aging**  
Miseon Kwon  
*Department of Neurology, University of Ulsan, Asan Medical Center, Korea*

## Morning Seminar

October 21

2F Main Hall A

8:00-8:50 **Morning Seminar**  
**[DAIICHI SANKYO CO., LTD. / AstraZeneca CO., LTD]**

Chair: Satoshi Kuroda, *Department of Neurosurgery, Graduate School of Medicine and Pharmaceutical Science, University of Toyama, Japan*

- MS-01-1** **Stop cardioembolic stroke! ~ Current status and future prospects of direct oral anticoagulants ~**  
Koichi Oki  
*Department of Neurology, Keio University School of Medicine, Japan*
- MS-01-2** **Acid suppression and antithrombotic therapy**  
Tatsuhiro Masaoka  
*Department of Gastroenterology and Hepatology, Keio University School of Medicine, Japan*

## ▀ Luncheon Seminar

**October 20**

**2F Main Hall A**

12:25-13:15 **Luncheon Seminar 1**  
**[Bristol-Myers Squibb / Pfizer Japan Inc.]**

*Chair: Yasushi Okada, National Hospital Organization Kyushu Medical Center, Japan*

**LS-01-1 Practical problems in DOAC use after stroke**

Kazunori Toyoda  
*Department of Cerebrovascular Medicine, National Cerebral and Cardiovascular Center, Japan*

**October 21**

**2F Main Hall A**

12:25-13:15 **Luncheon Seminar 2**  
**[Nippon Boehringer Ingelheim Co.,Ltd.]**

*Chair: Yoshiaki Itoh, Department of Neurology, Osaka City University Graduate School of Medicine, Japan*

**LS-02-1 Clinical Trial & Real World Evidence of Dabigatran**

Kazuo Kitagawa  
*Department of Neurology, Tokyo Women's Medical University School of Medicine, Japan*

## ▀ Evening Seminar

**October 19**

**2F Main Hall A**

17:00-18:00 **Evening Seminar 1**  
**[Eisai Co., Ltd.]**

*Chair: Masayasu Matsumoto, JCHO, Hoshigaoka Medical Center, Japan*

**ES-01-1 Post - stroke seizures and epilepsy**

Amami Kato  
*Department of Neurosurgery, Center for Intractable Epilepsy, Kindai University Faculty of Medicine, Japan*

**October 20**

**2F Main Hall A**

17:30-18:30 **Evening Seminar 2**  
**[Bayer Yakuhin, Ltd]**

*Chair: Yoshiaki Shiokawa, Department of Neurosurgery Medicine, Kyorin University School of Medicine, Japan*

**ES-02-1 The second stage of DOAC era —Interpretating Real World Evidence—**

Teruyuki Hirano  
*Department of Stroke and Cerebrovascular Medicine, Kyorin University School of Medicine, Japan*