## Special Lecture

### October 20

**Special Lecture 1**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event Details</th>
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</thead>
<tbody>
<tr>
<td>14:30-15:20</td>
<td><strong>Special Lecture 1</strong></td>
</tr>
<tr>
<td><strong>Chair:</strong></td>
<td>Norihiro Suzuki, Congress Chair, Department of Neurology, Keio University School of Medicine, Japan</td>
</tr>
<tr>
<td><strong>SL-01-1</strong></td>
<td>Recent advances in the research of Moyamoya disease in Japan</td>
</tr>
<tr>
<td><strong>Presenter:</strong></td>
<td>Susumu Miyamoto, Department of Neurosurgery, Kyoto University, Japan</td>
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</tbody>
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### October 21

**Special Lecture 2**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event Details</th>
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</thead>
<tbody>
<tr>
<td>13:30-14:30</td>
<td><strong>Special Lecture 2</strong></td>
</tr>
<tr>
<td><strong>Chair:</strong></td>
<td>Michiyasu Suzuki, Department of Neurosurgery, Yamaguchi University School of Medicine, Japan</td>
</tr>
<tr>
<td><strong>SL-02-1</strong></td>
<td>Endovascular thrombectomy – patient selection and future directions</td>
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<tr>
<td><strong>Presenter:</strong></td>
<td>Bruce Campbell, Royal Melbourne Hospital, The University of Melbourne, Australia</td>
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</tbody>
</table>

## Symposium

### October 20

**Symposium 1**

<table>
<thead>
<tr>
<th>Time</th>
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</thead>
<tbody>
<tr>
<td>9:00-10:30</td>
<td><strong>Symposium 1</strong></td>
</tr>
<tr>
<td><strong>Chair:</strong></td>
<td>Shotai Kobayashi, Shimane University, Japan</td>
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<tr>
<td></td>
<td>Jae-Kyu Roh, Korean Armed Forces Capital Hospital, Korea</td>
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<tr>
<td><strong>SY-01-1</strong></td>
<td>History and future of the Japanese Stroke data bank</td>
</tr>
<tr>
<td><strong>Presenter:</strong></td>
<td>Shotai Kobayashi, Shimane University, Japan</td>
</tr>
<tr>
<td><strong>SY-01-2</strong></td>
<td>Stroke Epidemiology: Global Trend</td>
</tr>
<tr>
<td><strong>Presenter:</strong></td>
<td>Keun-Sik Hong, Department of Neurology, Inje University, Korea</td>
</tr>
<tr>
<td><strong>SY-01-3</strong></td>
<td>Current status of the recurrence of non-cardiogenic strokes and the future prevention of stroke in Japan</td>
</tr>
<tr>
<td><strong>Presenter:</strong></td>
<td>Norihiro Suzuki, Department of Neurology, Keio University School of Medicine, Japan</td>
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<tr>
<td><strong>SY-01-4</strong></td>
<td>Impacts of comorbidity on outcome and secondary prevention in patients with ischemic stroke</td>
</tr>
<tr>
<td><strong>Presenter:</strong></td>
<td>Hyo-Suk Nam, Department of Neurology, Yonsei University, Korea</td>
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<tr>
<td><strong>SY-01-5</strong></td>
<td>Non-adherence to stroke preventive medications</td>
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<tr>
<td><strong>Presenter:</strong></td>
<td>Jinkwon Kim, Department of Neurology, Cha University, Korea</td>
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### 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*

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

### 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*

<table>
<thead>
<tr>
<th>Session</th>
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<tbody>
<tr>
<td>SY-03-1</td>
<td>Identify the patients who face acute delivery to a comprehensive stroke center by emergency medical service: FACE2AD Scale</td>
<td>Hiroshi Yamagami&lt;br&gt;<em>Department of Cranial Nerve Internal Medicine, National Cerebral and Cardiovascular Center Hospital, Japan</em></td>
</tr>
<tr>
<td>SY-03-2</td>
<td>Prehospital triage for acuter stroke patients with large vessel occlusion for endovascular therapy</td>
<td>Kazumi Kimura&lt;br&gt;<em>Department of Neurology, Nippon Medical College, Japan</em></td>
</tr>
<tr>
<td>SY-03-3</td>
<td>National Plan for the Establishment of Stroke Systems of Care in Korea</td>
<td>Soo-Joo Lee&lt;br&gt;<em>Department of Neurology, Eulji University, Korea</em></td>
</tr>
<tr>
<td>SY-03-4</td>
<td>Stroke Care Organization for Thrombolytic &amp; Endovascular Therapy in Korea</td>
<td>Joung-Ho Rha&lt;br&gt;<em>Department of Neurology, Inha University, Korea</em></td>
</tr>
<tr>
<td>SY-03-5</td>
<td>How we can deliver more efficient endovascular thrombectomy from the perspective of a standard hospital in Japan</td>
<td>Yuki Kamiya&lt;br&gt;<em>Department of Neurology, Showa University, Koto Toyosu Hospital, Japan</em></td>
</tr>
<tr>
<td>SY-03-6</td>
<td>Current Status of Recanalization Therapy in Korea and A Proposal for Renovation</td>
<td>Hee-Joon Bae</td>
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<td></td>
<td>Department of Neurology, Seoul National University, Korea</td>
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**October 21**

**2F Main Hall A**

<table>
<thead>
<tr>
<th>9:00-10:30</th>
<th><strong>Symposium 4</strong></th>
<th><strong>Novel therapeutic strategy for acute ischemic stroke</strong></th>
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<tbody>
<tr>
<td></td>
<td><strong>Chair:</strong> Kiyohiro Houkin, Department of Neurosurgery, Hokkaido University, Japan</td>
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<td></td>
<td>Byung-Woo Yoon, Seoul National University, Department of Neurology, Korea</td>
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**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**

<table>
<thead>
<tr>
<th>9:00-10:30</th>
<th><strong>Symposium 5</strong></th>
<th><strong>Progress in stroke rehabilitation</strong></th>
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<tbody>
<tr>
<td></td>
<td><strong>Chair:</strong> Shin-ichi Izumi, Tohoku University Graduate School of Biomedical Engineering, Department of Physical Medicine &amp; Rehabilitation, Japan</td>
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<td></td>
<td>Chin-Sang Chung, Sungkyunkwan University, Department of Neurology, Korea</td>
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**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
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-Il 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 1H-MRS in assessing cerebral blood flow and metabolism of the deep cerebral white matter in patients with chronic cerebral ischemia
Takamasu 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

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

Chair: Yukihiko 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 Shintoshi 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
**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*

**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

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 α-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 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, Tokyo, Japan

PS-02-3  β1-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 P2Y12 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
**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, Cheongsu, 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

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
**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

**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

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**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 PaCO₂ in SAH patients  
*Shota Yokoyama*  
Department of Cardio 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
Hirotaka 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

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 Intereintimal 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 ω-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 frail 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
<table>
<thead>
<tr>
<th>PS-08-8</th>
<th>Stroke recurrence in patients with atrial fibrillation undergoing carotid stenting</th>
<th>Jae Hyuk Kwak</th>
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<tr>
<td></td>
<td>Department of neurology, University of Keimyung, Daegu, Korea</td>
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13:25-14:25  **Poster Session 9**  
Imaging technology

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

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<tr>
<th>PS-09-1</th>
<th>Detection of lenticulostriate artery lesions in patients with acute stroke using high-resolution MRA at 7T</th>
<th>Haruna Miyazawa</th>
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<tr>
<td></td>
<td>Department of Neurology and Gerontology, Iwate Medical University, Japan</td>
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<tr>
<th>PS-09-2</th>
<th>Clinical and Imaging Characteristics of Internal Border Zone Infarcts involving the Anteromedial Temporal Lobe</th>
<th>Samyeol Ha</th>
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<tr>
<td></td>
<td>Department of Neurology, Haeundae Paik Hospital, Inje University College of Medicine, Busan, Korea</td>
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<tr>
<th>PS-09-3</th>
<th>Apparent diffusion coefficient reduction might be a predictor of poor outcome in patients with posterior reversible encephalopathy syndrome</th>
<th>Itaru Ninomiya</th>
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<tr>
<td></td>
<td>Departments of Neurology, Brain Research Institute, Niigata University, Japan</td>
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<th>PS-09-4</th>
<th>Acceleration-Selective Arterial Spin Labeling MR Angiography for Evaluation of Cortical Vessels of Main Cerebral Arteries after Revascularization Surgery for Moyamoya Disease</th>
<th>Ataru Nishimura</th>
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<tr>
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<td>Department of Neurosurgery, Graduate School of Medical Sciences, Kyushu University, Fukuoka, Japan</td>
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<tr>
<th>PS-09-5</th>
<th>Assessment of Collateral Circulation in Acute Ischemic Stroke: Simulated 2-phase CTA versus Simulated 3-phase CTA</th>
<th>Eung Yeop Kim</th>
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<tr>
<th>PS-09-6</th>
<th>Clinical significance of perfusion weighted MRI in acute lacunar infarction</th>
<th>Kyoungwon Baik</th>
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<td></td>
<td>Department of Neurology, Gangnam Severance Hospital, Yonsei University College of Medicine, Seoul, Korea</td>
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<tr>
<th>PS-09-7</th>
<th>Lesion patterns according to stroke classification using voxel-based lesion pattern analysis</th>
<th>Jieun Lee</th>
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<td>Department of Neurology, Samsung medical center, Seoul, Korea</td>
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<tr>
<th>PS-09-8</th>
<th>Cerebrovascular surgery utilizing high-resolution intraoperative imaging system</th>
<th>Yasuhiro Yamada</th>
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<td>Department of Neurosurgery, Fujita Health University, Banbuntane Hotokukai Hospital, Nagoya, Japan</td>
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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

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<thead>
<tr>
<th>PS-10-1</th>
<th>Spontaneous dissection of the extracranial internal carotid artery: Case report</th>
<th>Kenzo Koizumi</th>
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<td>Department of Neurology, Ichikawa General Hospital, Tokyo Dental College, Chiba, Japan</td>
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<tr>
<th>PS-10-2</th>
<th>A Case of Extracranial Vertebral Artery Dissection Associated with Dynamic Arterial Compression</th>
<th>Tetsuya Okuhara</th>
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<tr>
<td></td>
<td>Department of Neurosurgery, University of Yamanashi, Yamanashi, Japan</td>
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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

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
**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

**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  
Ileok 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 GalenCerebral 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
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

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

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

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**

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**

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**

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**

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 —Interpreting Real World Evidence—  
  Teruyuki Hirano  
  Department of Stroke and Cerebrovascular Medicine, Kyorin University School of Medicine, Japan