

Hot Topics 01

HT-01 May 18 (Wed) 9:50~11:50 Room2

(Kobe International Exhibition Hall [Exhibition Hall A] Hall No.1 Building, 2nd Floor)

Genetics in Clinical Strokeology

Chairs: Hidekazu Tomimoto

(Department of Neurology, Mie University Graduate School of
Medicine)

Osamu Onodera

(Department of Neurology, Brain Research Institute, Niigata
University)

HT-01-1 Progress of the research in CADASIL

Speaker: Toshiki Mizuno

(Department of Neurology, Kyoto Prefectural University of
Medicine)

HT-01-2 Molecular mechanism of cerebral small vessel
disease. Lesson from CARASIL

Speaker: Osamu Onodera

(Department of Neurology, Brain Research Institute, Niigata
University)

HT-01-3 Cerebrovascular diseases associated with RNF213

Speaker: Satoru Miyawaki

(Department of Neurosurgery, The University of Tokyo)

HT-01-4 What is molecular mechanism of Marfan syndrome?

Speaker: Jun Goto

(International University of Health and Welfare, Mita Hospital,
Department of Neurology)

Hot Topics 02



HT-02 May 18 (Wed) 9:50~11:50 Room4

(Kobe International Exhibition Hall [Room 3A] Hall No.2 Building, 3rd Floor)

Myasthenia gravis: New insights and overview

Chairs: Naoko Matsui

(Department of Neurology, Tokushima University Hospital)

Tomihiko Imai

(Sapporo Medical University School of Health Sciences)

HT-02-1 Perspective in the study of Japanese Clinical
Guideline and overview

Speaker: Tomihiko Imai

(Sapporo Medical University School of Health Sciences)

HT-02-2 Thymectomy in Non-thymomatous Myasthenia
Gravis: MGTX study a Randomized, Controlled
Trial

Speaker: Hiroaki Yoshikawa

(Kanazawa University, Health Service Center)

HT-02-3 Inflammatory Markers of Myasthenia Gravis

Speaker: Akiyuki Uzawa

(Department of Neurology, Graduate School of Medicine,
Chiba University)

HT-02-4 Intrathymic pathogenesis in various Myasthenia
Gravis (MG) subgroups

Speaker: Alexander Marx

(University of Heidelberg, Germany)

HT-02-5 Approach from T cell development in MG thymus

Speaker: Naoko Matsui

(Department of Neurology, Tokushima University Hospital)

Hot Topics 03



HT-03 May 18 (Wed) 9:50~11:50 Room5

(Kobe International Exhibition Hall [Room 2A] Hall No.2 Building, 2nd Floor)

Cutting edge of metabolic/hereditary neuropathies

Chairs: Satoshi Kuwabara

(Department of Neurology, Chiba University)

Haruki Koike

(Department of Neurology, Nagoya University Graduate
School of Medicine)

HT-03-1 Cutting-edge therapies for amyloid neuropathy

Speaker: Yoshiki Sekijima

(Department of Medicine (Neurology & Rheumatology),
Shinshu University School of Medicine)

HT-03-2 Therapeutic strategy for Charcot-Marie-Tooth
disease

Speaker: Masanori Nakagawa

(North Medical Center, Kyoto Prefectural University of
Medicine)

HT-03-3 Current therapeutic strategies for POEMS
syndrome

Speaker: Sonoko Misawa

(Department of Neurology, Graduate School of Medicine,
Chiba University)

HT-03-4 Chemotherapy-induced Peripheral Neuropathy:
From Pathophysiology to Neuroprotection

Speaker: Susanna B. Park

(Brain and Mind Centre, University of Sydney, Australia)

Hot Topics 04

HT-04 May 18 (Wed) 13:15~15:15 Room5

(Kobe International Exhibition Hall [Room 2A] Hall No.2 Building, 2nd Floor)

Animal models for studying neurological diseases: from worms to primates

Chairs: Yoshitaka Nagai

(Department of Neurotherapeutics, Osaka University
Graduate School of Medicine/Department of Degenerative
Neurological Diseases, National Center of Neurology and
Psychiatry)

Koji Yamanaka

(Research Institute of Environmental Medicine, Nagoya
University)

HT-04-1 *Caenorhabditis elegans* as a model animal for research on neurodegenerative diseases

Speaker: Yoshiaki Furukawa

(Department of Chemistry, Keio University)

HT-04-2 *Drosophila* models to study human neurodegenerative diseases

Speaker: Yoshitaka Nagai

(Department of Neurotherapeutics, Osaka University
Graduate School of Medicine/Department of Degenerative
Neurological Diseases, National Center of Neurology and
Psychiatry)

HT-04-3 From Fish to Human Neurological Disorders

Speaker: Hideaki Matsui

(Department of Neuroscience of Disease, Center for
Transdisciplinary Research, Niigata University/Brain
Research Institute, Niigata University)

HT-04-4 CRISPR/Cas9 mediated genome editing in mice

Speaker: Masahito Ikawa

(Research Institute for Microbial Diseases, Osaka University)

HT-04-5 Disease Modeling using transgenic marmosets

Speaker: Hideyuki Okano

(Keio University School of Medicine, Department of
Physiology)

Co-hosted by : The Japan Neuroscience Society

Hot Topics 05

HT-05 May 18 (Wed) 13:15~15:15 Room7
(Kobe Portopia Hotel [Kairaku 1] Main Building B1F)

MRI on the edge

Chairs: Aya M. Tokumaru

(Department of Diagnostic Radiology, Tokyo Metropolitan
Medical Center of Gerontology)

Masafumi Harada

(Department of Radiology, Tokushima University)

HT-05-1 Different visualization of transparent brain by MR
imaging

Speaker: Shigeki Aoki

(Department of Radiology, Juntendo University)

HT-05-2 Visualization of Brain Structures and Oxygen
Metabolism using Quantitative Susceptibility
Mapping

Speaker: Kohsuke Kudo

(Department of Diagnostic and Interventional Radiology,
Hokkaido University Hospital)

HT-05-3 Looking into microstructures in the brain using
diffusion images

Speaker: Toshiaki Taoka

(Department of Radiology, Nagoya University)

HT-05-4 Inspection of brain activity: Brain function
evaluation by noninvasive CBF measurement using
ASL-MRI

Speaker: Tomoyuki Noguchi

(Department of Radiology, National Center for Global Health
and Medicine (NCGM))

HT-05-5 Seeing a dreaming brain -Human brain activity
accompanying rapid eye movements during REM
sleep-

Speaker: Satoru Miyauchi

(National Institute of Information and Communications
Technology)

Hot Topics 06 (Proposed Symposium)

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HT-06 May 19 (Thu) 8:00~10:00 Room14
(Kobe International Conference Center [Meeting Room 501] 5F)

Neuroregeneration and nucleic acid medicine

Chairs: Hideyuki Okano

(Keio University School of Medicine, Department of
Physiology)

Masayuki Nakamori

(Department of Neurology, Osaka University Graduate School
of Medicine)

HT-06-1 Antisense Oligonucleotide Therapies for the
Treatment of Neurodegenerative Diseases

Speaker: Frank Bennett

(IONIS Pharmaceuticals, USA)

HT-06-2 Novel oligonucleotide based on DNA/RNA
heteroduplex structures

Speaker: Kazutaka Nishina

(Department of Neurology and Neurological Science, Graduate
School, Tokyo Medical and Dental University)

HT-06-3 Therapeutic development using cell penetrating,
asymmetric RNAi triggers

Speaker: Dong-ki Lee

(Department of Chemistry, Sungkyunkwan University,
Korea)

HT-06-4 Migration and maturation of new neurons in the
normal and injured adult brain

Speaker: Kazunobu Sawamoto

(Department of Developmental and Regenerative Biology,
Nagoya City University Graduate School of Medical Sciences)

HT-06-5 The role of adult neural stem cell-neurogenesis in
the pathogenesis of psychiatric disorders

Speaker: Seiji Hitoshi

(Department of Integrative Physiology, Shiga University of
Medical Science)

HT-06-6 Unique embryonic neurogenesis in the hippocampus, an adult neurogenic region

Speaker: Tatsunori Seki

(Department of Histology and Neuroanatomy, Tokyo Medical University)

Hot Topics 07 (Proposed Symposium)

HT-07 May 19 (Thu) 15:15~16:55 Room2

(Kobe International Exhibition Hall [Exhibition Hall A] Hall No.1 Building, 2nd Floor)

Embolic strokes of undetermined source (ESUS): a new therapeutic target

Chairs: Shinichiro Uchiyama

(Clinical Research Center for Medicine, International University of Health and Welfare)

Kazunori Toyoda

(Department of Cerebrovascular Medicine, National Cerebral and Cardiovascular Center)

HT-07-1 Management of stroke patients with definite embolic sources

Speaker: Masahiro Yasaka

(Department of Cerebrovascular Medicine and Neurology, Cerebrovascular Center, Clinical Research Institute, Kyushu Medical Center)

HT-07-2 Embolic strokes of undetermined source (ESUS): a new clinical construct

Speaker: Satoru Ishibashi

(Department of Neurology and Neurological Science, Tokyo Medical and Dental University)

HT-07-3 Embolic source detection from ESUS to Embolic Stroke of Ascertained Source (ESAS)

Speaker: Yasuyuki Iguchi

(Department of Neurology, Jikei University School of Medicine)

HT-07-4 How to prevent recurrence of embolic stroke of undetermined source

Speaker: Shinichiro Uchiyama

(Clinical Research Center for Medicine, International University of Health and Welfare)

Co-hosted by : Japanese Heart Rhythm Society

Hot Topics 08



HT-08 May 19 (Thu) 15:15~17:15 Room6

(Kobe International Exhibition Hall [Room 3B] Hall No.2 Building, 3rd Floor)

Molecular dissection of spastic paraplegia

Chairs: Toshitaka Kawarai

(Department of Clinical Neuroscience, Institute of Biomedical Sciences, Tokushima University Graduate School)

Hiroyuki Ishiura

(Department of Neurology, The University of Tokyo)

HT-08-1 Emerging genetic and cellular insights into HSP pathogenesis

Speaker: Craig Blackstone

(NINDS, US National Institutes of Health, USA)

HT-08-2 Molecular epidemiology of HSPs in Japan

Speaker: Kishin Koh

(Department of Neurology, University of Yamanashi)

HT-08-3 Genetic Analysis in a Cohort of Taiwanese Patients with Hereditary Spastic Paraplegia

Speaker: Chin-Song Lu

(Chang Gung Medical Center at Linkou and Chang Gung University, Taiwan)

HT-08-4 Strategies for identifying causative genes of HSP

Speaker: Hiroyuki Ishiura

(Department of Neurology, The University of Tokyo)

HT-08-5 A Homozygous loss-of-function mutation in DNAJA3 causes HMSN type V

Speaker: Toshitaka Kawarai

(Department of Clinical Neuroscience, Institute of Biomedical Sciences, Tokushima University Graduate School)

HT-09 May 19 (Thu) 15:15~16:55 Room15

(Kobe International Conference Center [Meeting Room502] 5F)

Combining imaging and therapy: Neuroimaging-based companion diagnostics and theranostics

Chairs: Makoto Higuchi

(Molecular Imaging Center, National Institute Radiological Sciences)

Makoto Yoneda

(Faculty of Nursing and Social Welfare Sciences, Fukui Prefectural University)

HT-09-1 In vivo monitoring of AADC gene delivery by PET

Speaker: Shin-ichi Muramatsu

(Division of Neurology, Jichi Medical University/Center for Gene & Cell Therapy, The Institute of Medical Science, The University of Tokyo)

HT-09-2 The Role of Amyloid and Tau Imaging in Clinical Trials in Alzheimer's Disease

Speaker: Michael D. Devous

(Vice President, Avid Radiopharmaceuticals, Inc., USA)

HT-09-3 Imaging and treatment targeting adenosine receptors in Parkinson's disease

Speaker: Masahiro Mishina

(Department of Neuro-pathophysiological Imaging, Graduate School of Medicine, Nippon Medical School/Research Team for Neuroimaging, Tokyo Metropolitan Institute of Gerontology)

HT-09-4 In vivo Imaging for Monitoring Differentiation and Manipulating Function of iPS Cells

Speaker: Bin Ji

(National Institute of Radiological Sciences)

Hot Topics 10

HT-10 May 20 (Fri) 8:00~10:00 Room3

(Kobe International Exhibition Hall [Exhibition Hall B] Hall No.1 Building, 2nd Floor)

Autoantibodies in Neuroimmunological Disorders: Treatable pathophysiology that we should know

Chairs: Takahiro Iizuka

(Department of Neurology, Kitasato University School of Medicine)

Shunya Nakane

(Department of Neurology (Molecular Neurology and Therapeutics), Kumamoto University Hospital)

HT-10-1 Neuroimmunological diseases and autoantibodies: Progress in these 10 years

Speaker: Takashi Inuzuka

(Department of Neurology & Geriatrics, Gifu University Graduate School of Medicine)

HT-10-2 Clinical spectrum and pathophysiology of NMDA receptor antibody-associated syndrome

Speaker: Takahiro Iizuka

(Department of Neurology, Kitasato University School of Medicine)

HT-10-3 Anti-GAD antibody associated syndrome

Speaker: Kazunori Nanri

(Tokyo Medical University Hachioji Medical Center)

HT-10-4 Anti-VGKC complex antibodies associated disorders

Speaker: Osamu Watanabe

(Department of Neurology, Kagoshima University Hospital)

HT-10-5 Clinical and pathological significances of autoantibodies to LRP4

Speaker: Osamu Higuchi

(Department of Clinical Research, Nagasaki Kawatana Medical Center)

HT-10-6 Anti-nicotinic acetylcholine receptor antibody mediated neuroimmunological syndrome

Speaker: Shunya Nakane

(Department of Neurology (Molecular Neurology and Therapeutics), Kumamoto University Hospital)

Co-hosted by : The Japanese Society for Neuroimmunology

Hot Topics 11

HT-11 May 20 (Fri) 8:00~10:00 Room7

(Kobe Portopia Hotel [Kairaku 1] Main Building B1F)

SCA Research-How Far We've Come and What Lies Ahead?

Chairs: Kinya Ishikawa

(The Center of Personalized Medicine for Healthy Aging, Tokyo Medical and Dental University)

Kei Watase

(Center for Brain Integration Research, Tokyo Medical and Dental University)

HT-11-1 A heterozygous mutation in ELOVL4 leading to SCA34

Speaker: Kokoro Ozaki

(Department of Neurology and Neurological Science, Graduate School of Medical and Dental Sciences, Tokyo Medical and Dental University)

HT-11-2 Role of microglial response in the pathogenesis of SCA6

Speaker: Kei Watase

(Center for Brain Integration Research, Tokyo Medical and Dental University)

HT-11-3 Investigation of spinocerebellar ataxia utilizing patient-derived iPS cells

Speaker: Keiko Mugeruma

(RIKEN CDB)

HT-11-4 Generation of a transgenic common marmoset model for Spinocerebellar Ataxia Type 3

Speaker: Ikuo Tomioka

(Shinshu University, Institute for Biomedical Science/
National Center of Neurology and Psychiatry)

HT-11-5 Development of a novel gene therapy against SCA

Speaker: Hitoshi Okazawa

(Tokyo Medical and Dental University, Medical Research
Institute, Neuropathology)

Co-hosted by : The Japan Neuroscience Society

Japanese Association of Cerebellum Research

Hot Topics 12



HT-12 May 20 (Fri) 8:00~10:00 Room8

(Kobe Portopia Hotel [Kairaku 2] Main Building B1F)

Expanding prion concept to cerebral beta-amyloidosis

Chairs: Masahito Yamada

(Department of Neurology and Neurobiology of Aging,
Kanazawa University Graduate School of Medical Sciences)

Takeshi Iwatsubo

(Department of Neuropathology, Graduate School of Medicine,
The University of Tokyo)

HT-12-1 Mechanisms of transmission of prion diseases

Speaker: Atsushi Kobayashi

(Graduate School of Veterinary Medicine, Hokkaido
University)

HT-12-2 Propagation and spreading of Alzheimer lesions

Speaker: Mathias Jucker

(Hertie Institute for Clinical Brain Research, University of
Tübingen, Germany/German Center for Neurodegenerative
Diseases, Tübingen, Germany)

HT-12-3 Possible iatrogenic transmission of cerebral beta-amyloidosis

Speaker: Tsuyoshi Hamaguchi

(Department of Neurology and Neurobiology of Aging,
Kanazawa University Graduate School of Medical Science)

HT-12-4 Progression mechanism of synucleinopathies

Speaker: Seung-Jae Lee

(Department of Biomedical Sciences, Seoul National
University College of Medicine, Korea)

Co-hosted by : Asian Pacific Society of Prion Research

Hot Topics 13



HT-13 May 20 (Fri) 8:00~10:00 Room13

(Kobe International Conference Center [Meeting Rooms 401+402] 4F)

Understanding ALS pathogenesis by Updated progress in
C9ORF72-TDP43 lineage

Chairs: Takanori Yokota

(Department of Neurology and Neurological Science, Tokyo
Medical and Dental University)

Makoto Urushitani

(Department of Neurology, Kyoto University Graduate School
of Medicine)

HT-13-1 Amyotrophic lateral sclerosis and C9ORF72/TDP-
43 pathology

Speaker: Hitoshi Takahashi

(Department of Pathology, Brain Research Institute, Niigata
University)

HT-13-2 Deciphering the expression and function of
C9ORF72 using mouse model

Speaker: Naoki Suzuki

(Department of Neurology, Tohoku University / Department
of Stem Cell and Regenerative Biology, Harvard University,
USA)

HT-13-3 C9ORF72 repeat expansion in mice causes TDP-43-
linked ALS

Speaker: Hiroki Sasaguri

(Department of Neuroscience, Meiyu Clinic, USA)

HT-13-4 C9orf72-Rab mediates defective vesicle trafficking in C9ALS/FTD and rescue by antisense intervention **adopted**

Speaker: Yoshitsugu Aoki

(Department of Molecular Therapy, National Institute of Neuroscience, National Center of Neurology and Psychiatry)

HT-13-5 Impaired VHL/CUL2-mediated clearance of misfolded TDP-43 underlies oligodendrocyte inclusions in ALS

Speaker: Makoto Urushitani

(Department of Neurology, Kyoto Graduate School of Medicine)

Hot Topics 14

HT-14 May 20 (Fri) 13:15~14:55 Room7

(Kobe Portopia Hotel [Kairaku 1] Main Building B1F)

Inflammatory myopathy- a changing concept

Chairs: Shigeaki Suzuki

(Department of Neurology, Keio University School of Medicine)

Mitsuru Kawai

(Higashisaitama National Hospital)

HT-14-1 Polymyositis: Neurology vs. Rheumatology

Speaker: Ichizo Nishino

(Department of Neuromuscular Research, National Institute of Neuroscience, National Center of Neurology and Psychiatry (NCNP))

HT-14-2 Clinical and pathological features of anti-HMGCR antibody-associated autoimmune myopathies

adopted

Speaker: Masato Kadoya

(Department of Neurology and Anti-aging Medicine, National Defense Medical College/Department of Neurology, The University of Tokyo)

HT-14-3 Dermatomyositis in dermatology -Clinical features of dermatomyositis-specific autoantibodies-

Speaker: Yukie Yamaguchi

(Department of Environmental Immuno-Dermatology,
Yokohama City University Graduate School of Medicine)

HT-14-4 Therapeutic strategy of polymyositis/
dermatomyositis

Speaker: Shinji Sato

(Division of Rheumatology, Department of Internal Medicine,
Tokai University School of Medicine)

HT-14-5 Physical therapy and rehabilitation for
inflammatory muscle disease

Speaker: Kaori Muraoka

(Keio University, School of Medicine, Department of
Rehabilitation)

Hot Topics 15



HT-15 May 20 (Fri) 13:15~14:55 Room8
(Kobe Portopia Hotel [Kairaku 2] Main Building B1F)

Gene therapy & regenerative medicine

Chairs: Hideki Mochizuki

(Department of Neurology, Osaka University Graduate School
of Medicine)

Haruhisa Inoue

(Center for iPS Cell Research and Application, Department of
Cell Growth and Differentiation, Kyoto University)

HT-15-1 MRI-based Platform for AAV2-GDNF and AAV-
2AADC Gene Delivery in Parkinson's disease

Speaker: Krystof Bankiewicz

(Neurosurgery and Neurology, University of California San
Francisco, CA, USA)

HT-15-2 Cell-Based Therapeutics for Parkinson's disease

Speaker: Jun Takahashi

(Kyoto University, Center for iPS Cell Research and
Application)

- HT-15-3 Gene therapy with antisense oligonucleotides for neurological and neuromuscular disorders
 Speaker: Masayuki Nakamori
 (Department of Neurology, Osaka University Graduate School of Medicine)
- HT-15-4 Oscillatory control of proliferation and differentiation of neural stem cells
 Speaker: Ryoichiro Kageyama
 (Kyoto University, Institute for Virus Research/Kyoto University, WPI-iCeMS)

Hot Topics 16 (Proposed Symposium)

- HT-16 May 20 (Fri) 13:15~14:55 Room9
 (Kobe Portopia Hotel [Kairaku 3] Main Building B1F)**
 Recent advances of socio-medical support for the patients with intractable diseases
 Chairs: Tetsuo Komori
 (National Hakone Hospital, Center for Neuromuscular and Intractable Disease)
 Kouichi Mizoguchi
 (Shizuoka Fuji Hospital)
- HT-16-1 Co-working strategy between medical and care service for better QOL of the Nanbyo patient
 Speaker: Tetsuo Komori
 (National Hakone Hospital, Center for Neuromuscular and Intractable Disease)
- HT-16-2 The current state of the incurable disease support and cooperation with future's medical treatment
 Speaker: Hiromi Kawajiri
 (Gunma Intractable Disease Support Center)
- HT-16-3 Registration in the specified intractable diseases can alter medical system for muscular dystrophy
 Speaker: Tsuyoshi Matsumura
 (Department of Neurology, National Hospital Organization Toneyama National Hospital)

HT-16-4 Importance of study on the use of home mechanical ventilators and its contribution to home care

Speaker: Takafumi Miyachi

(National Hospital Organization, Yanai Medical Center)

Hot Topics 17



HT-17 May 20 (Fri) 13:15~15:15 Room10

(Kobe International Conference Center [Main Hall] B1F · 1F)

Translational approach for prevention and treatment of MS

Chairs: Takashi Yamamura

(Department of Immunology, National Institute of Neuroscience, NCNP)

Takayuki Kondo

(Department of Clinical Network and Collaborative Medicine, Kyoto University)

HT-17-1 Impact of Nutrition on CNS Autoimmunity and Their Therapeutic Potential for Multiple Sclerosis

Speaker: Ralf Gold

(Department of Neurology, St. Josef-Hospital/Ruhr-University Bochum, Germany)

HT-17-2 Alterations in gut flora giving clues to the cure of MS

Speaker: Sachiko Miyake

(Department of Immunology, Juntendo University School of Medicine)

HT-17-3 Investigator-Initiated Clinical Trial (first-in-human, Phase I) of invariant NKT cell ligand OCH **adopted**

Speaker: Daisuke Noto

(Department of Immunology, National Institute of Neuroscience, National Center of Neurology and Psychiatry (NCNP) / Department of Immunology, Juntendo University Graduate School of Medicine)

HT-17-4 Current and future treatment for multiple sclerosis

Speaker: Ho Jin Kim

(Department of Neurology, National Cancer Center, Korea)

HT-17-5 IL-6 signal blockade for CNS autoimmune diseases

Speaker: Masakazu Nakamura

(Department of Immunology, National Institute of Neuroscience, National Center of Neurology and Psychiatry (NCNP) / Department of Neurology, Hokkaido Medical Center)

Hot Topics 18

HT-18 May 21 (Sat) 8:00~10:00 Room14

(Kobe International Conference Center [Meeting Room 501] 5F)

Developments of Pathogenic Research in Demyelinating Diseases

Chairs: Ichiro Nakashima

(Department of Neurology, Tohoku University School of Medicine)

Makoto Matsui

(Department of Neurology, Kanagawa Medical University)

HT-18-1 Visualizing central nervous system myelin using MRI: The Myelin Map and its clinical application

Speaker: Jin Nakahara

(Department of Neurology, Keio University School of Medicine)

HT-18-2 Pathogenesis of secondary progressive multiple sclerosis

Speaker: Takashi Yamamura

(Department of Immunology, National Institute of Neuroscience, NCNP)

HT-18-3 Clinical features of demyelinating diseases with anti-MOG antibody

Speaker: Ichiro Nakashima

(Department of Neurology, Tohoku University School of Medicine)

HT-18-4 Combined central and peripheral demyelination (CCPD) as anti-Neurofascin antibody-related disorders

Speaker: Ryo Yamasaki

(Department of Neurology, Kyushu University Hospital)