

Program



The 32nd Annual Scientific Meeting of
the Japanese Society of Hypertension

JSH2009



The 32nd Annual Scientific Meeting of
the Japanese Society of Hypertension

JSH2009

International Session (Oral) 1 : ISO1

8:30-9:30

Chairpersons:

Yoshihiro Ogawa (Department of Molecular Medicine and Metabolism, Tokyo Medical and Dental University Medical Research Institute)

Yusuke Ohya (Department of Cardiovascular Medicine, Nephrology and Neurology, University of the Ryukyus, Faculty of Medicine)

ISO1-1 Role of Cry genes in Development and Progression of Atherosclerosis

Vita Anggraeni, Noriaki Emoto, Hidemi Nonaka, Kazuhiko Nakayama, Wulan Anggrahini, Bambang Widyantoro, Kazuya Miyagawa, Hirowati Ali, Kenichi Hirata

Division of Cardiovascular Medicine, Department of Internal Medicine, Kobe University Graduate School of Medicine, Japan

ISO1-2 Manipulation of Intracellular Redox State using siRNA-mediated Knockdown of Thiol-metabolizing Pathways leads to Differential Modulation of Endothelial Nitric Oxide PathwaysToru Sugiyama^{1,2}, Yukio Hirata¹, Thomas Michel²¹Department of Clinical and Molecular Endocrinology, Tokyo Medical and Dental University Graduate School,²Cardiovascular Division, Department of Medicine, Brigham and Women's Hospital, Harvard Medical School**ISO1-3 Imidapril Prevents Contrast Media-Induced Nephropathy via Bradykinin Pathway**Jun-ichi Suzuki¹, Mitsuaki Isobe²¹Department of Advanced Clinical Science and Therapeutics, University of Tokyo, Tokyo, Japan, ²Department of Cardiovascular Medicine, Tokyo Medical and Dental University**ISO1-4 The Dual Regulatory Effects of Losartan in Angiotensin II-receptor Mediated Signal Transduction in Vascular Smooth Muscle Cells**Yaqiong Wu^{1,4}, Hidenori Takahashi², Atsushi Numabe³, Yasuo Yanagi², Yasuhiro Tamaki², Etsu Suzuki¹, Makoto Araie², Yoshio Uehara⁴¹The Department of Cardiological Medicine, University of Tokyo, Tokyo, Japan, ²Department of Ophthalmology, University of Tokyo, Tokyo, Japan, ³Department of Clinical and Laboratory Medicine, Dokkyo University, Mibu, Tochigi, Japan,⁴Health Service Center, University of Tokyo, Tokyo, Japan**ISO1-5 β 1(Arg389Gly, Ser49Gly)- and β 2(Arg16Gly)-adrenoceptor Polymorphisms are Related to Left Ventricular Hypertrophy Using ECG in Middle-aged, Normotensive subjects**Kazuko Masuo¹, Tomohiro Katsuya², Hiromi Rakugi², Toshio Ogihara², Michael Tuck³¹Baker Heart Research Institute, Melbourne, Australia, ²Osaka University Postgraduate School of Medicine, Suita, Osaka, Japan,³Sepulveda VA Medical Center and the David Geffen UCLA School of Medicine, Sepulveda, CA, USA

Chairpersons:

Naoyuki Hasebe (Department of Cardiovascular Medicine, Asahikawa Medical College)

Hirofumi Makino (Department of Medicine and Clinical Science, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences)

ISO2-6 An Endogenous Estrogen Metabolite, 2-Methoxyestradiol, and Membrane Microviscosity in Normotensive and Hypertensive Postmenopausal Women :**An Electron Spin Resonance Investigation**

Kazushi Tsuda

Cardiovascular and Metabolic Research Center, Kansai University of Health Sciences, Osaka, Japan

ISO2-7 Reproducibility of ambulatory blood pressure in hypertensive patients with treated and untreated conditionsKazuo Eguchi¹, Satoshi Hoshide¹, Yoko Hoshide¹, Shizukiyo Ishikawa², Kazuyuki Shimada¹, Kazuomi Kario¹¹Division of Cardiovascular Medicine, Department of Medicine, Jichi Medical University School of Medicine, Tochigi, Japan,²Division of Community and Family Medicine, Department of Medicine, Jichi Medical University School of Medicine, Tochigi, Japan**ISO2-8 Inappropriateness of Left Ventricular Hypertrophy influences BNP but not Influences Diastolic Filling in Untreated Hypertensive Patients**

Akiyo Eguchi, Akiko Goda, Shinji Nakao, Takeshi Tsujino, Misato Otsuka, Chikako Yoshida, Yoshiro Naito, Masaaki Kawabata, Tohru Masuyama

Cardiovascular Division, The Department of Internal Medicine, Hyogo College of Medicine, Hyogo, Japan

ISO2-9 Benidipine has Similar Effects to Losartan at Modulating Arterial Stiffness and Central Blood Pressure in Mild to Moderate Essential Hypertension.

Sang-Hyun Ihm, Hui Kyung Jeon, Shung Chull Chae, Do Sun Lim, Kee Sik Kim, Dong Ju Choi,

Jong Won Ha, Dong Soo Kim, Kye Hun Kim, Myeong Chan Cho, Sang Hong Back

The BELASCO trial investigators, Republic of Korea

ISO2-10 Effects of valsartan and amlodipine on cardio-renal protection in Japanese hypertensive patients: The Valsartan Amlodipine Randomized Trial (VART)

Hiroya Narumi, Hiroyuki Takano, Satoshi Shindo, Keiko Nakayama, Miwa Fujita, Hiroshi Mizuma, Yoichi Kuwabara, Issei Komuro

Department of Cardiovascular Science and Medicine, Chiba University Graduate School of Medicine, Japan

International Session (Oral) 3 : ISO3

10:50-11:40

Chairpersons: Toshio Kushiro (Nihon University Health Care Center)
Shigeto Morimoto (Department of Geriatric Medicine, Kanazawa Medical University)

ISO3-11 Effects of azelnidipine on systemic hemodynamics and diastolic function in patients with hypertension. The CALBLOC study.

Shin Takiuchi¹, Katsuhisa Ishii², Fumiaki Nakamura³, Toshihiko Nagano⁴, Katsuomi Iwakura⁵, Kei Tawarahara⁶, Mikio Mukai⁷, Masanori Shinoda⁸, Taro Minagawa⁹, Naoki Gotoh¹⁰, Hiroshi Ito⁵

¹Department of Cardiology, Higashi Takarazuka Satoh Hospital, Takarazuka, Japan, ²Department of Cardiology, Kansai Electric Power Hospital, Osaka, Japan, ³Department of Internal Medicine, Ibaraki Iseikai Hospital, Ibaraki, Japan, ⁴Department of Internal Medicine, Iwasuna Hospital, Gifu, Japan, ⁵Department of Cardiology, Sakurabashi Watanabe Hospital, Osaka, Japan, ⁶Department of Cardiology, Hamamatsu Red Cross Hospital, Hamamatsu, Japan, ⁷Department of Cardiology, Kinki Central Hospital, Itami, Japan, ⁸Department of Internal Medicine, Toyota Kousei Hospital, Toyota, Japan, ⁹Minagawa Clinic, Gifu, Japan, ¹⁰Goto Clinic, Gifu, Japan

ISO3-12 Relationship between baseline renal dysfunction and atherosclerotic events in patients with type 2 diabetes: Sub-analyses from the JPAD trial

Yoshihiko Saito¹, Hisao Ogawa², Takeshi Morimoto³, Shiro Uemura¹, Yasuhiro Akai¹, Atsushi Kubo¹, Hirofumi Soejima², Masafumi Nakayama²

¹1st Department of Internal Medicine, Nara Medical University, Kashihara, Japan, ²Department of Cardiology, Kumamoto University, Kumamoto, Japan, ³Center for Medical Education, Kyoto University Graduate School of Medicine

ISO3-13 Docosahexaenoic Acid or Olive Oil Supplementation on Blood Pressure and Serum Lipids in Scottish Men with Mild Hypertension and Hypercholesterolaemia

Miki Sagara¹, Takashi Taguchi², Mari Mori², Yukio Yamori²

¹Laboratory of Preventive Nutritional Medicine, Research Institute for Production Development, Kyoto, Japan, ²Institute for World Health Development, Mukogawa Woman's University, Hyogo, Japan

ISO3-14 Undetected hypertension: Related factors and long term follow up in a representative Japanese cohort. NIPPON DATA80

Tanvir Chowdhury Turin¹, Katsuyuki Miura¹, Nahid Rumana¹, Yasuyuki Nakamura², Yoshikuni Kita¹, Aya Higashiyama¹, Sayaka Kadowaki¹, Tomonori Okamura³, Akira Okayama⁴, Hirotsugu Ueshima¹

¹Department of Health Science, Shiga University of Medical Science, Japan, ²Department of Cardiovascular Epidemiology, Kyoto Women's University, Kyoto, Japan., ³Department of Preventive Cardiology, National Cardiovascular Center, Osaka, Japan., ⁴The First Institute for Health Promotion and Health Care, Tokyo, Japan.

International Session, Basic 1: (IP01)

13:00-13:30

Chairpersons: Etsu Suzuki (Institute of Medical Science, St. Marianna University School of Medicine)

IP01-001 Paradoxical activation of the aldosterone synthesis during a high salt intake in Dahl salt-sensitive rat

Tomohiro Matsuhashi¹, Motoaki Sano², Keiichi Fukuda²

¹Department of Cardiology, Keio University School of Medicine, Tokyo, Japan, ²Department of Regenerative Medicine and Advanced Cardiac Therapeutics, Keio University School of Medicine, Tokyo, Japan

IP01-002 Existence of multiple binding sites in (pro)renin receptor for prorenin

AHM Nurun Nabi¹, Kazal Boron Biswas², Akio Ebihara¹, Yoshie Arai¹, Tsutomu Nakagawa¹, Atsuhiko Ichihara³, Tadashi Inagami⁴, Fumiaki Suzuki^{1,2}

¹Fac Appl Biol Sci, Gifu University, Japan, ²United Grad Sch Agri Sci, Gifu University, Japan, ³Department of Internal Medicine, Keio University School of Medicine, Tokyo, Japan, ⁴School of Medicine, Vanderbilt University, Nashville, TN, USA

IP01-003 *In vitro* inhibition of the activity of mature renin and (pro)renin receptor-bound activated prorenin by aliskiren

Kazal Boron Biswas¹, AHM Nurun Nabi², Akio Ebihara², Yoshie Arai², Tsutomu Nakagawa², Atsuhiko Ichihara³, Toshifumi Watanabe⁴, Fumiaki Suzuki^{1,2}

¹Unit Grad Sch Agri Sci, Gifu University, Japan, ²Fac Appl Biol Sci, Gifu University, Japan, ³Department of Internal Medicine, Keio University School of Medicine, Tokyo, Japan, ⁴Novartis Pharma K.K., Tokyo, Japan

IP01-004 Tetrahydrobiopterin (BH₄) Redox Recycling is a Key Determinant of eNOS-modulated Endothelial Responses

Toru Sugiyama^{1,2}, Yukio Hirata¹, Thomas Michel²

¹Department of Clinical and Molecular Endocrinology, Tokyo Medical and Dental University Graduate School, ²Cardiovascular Division, Department of Medicine, Brigham and Women's Hospital, Harvard Medical School

IP01-005 RhoA/rho-kinase pathway facilitates rat aortic contraction through increases in binding affinities of endothelin-1 and noradrenaline to their receptors

Takaki Yamamura¹, Tetsuya Sakajiri¹, Haruo Abe², Kyusa Abe¹, Takako Sawada¹

¹Department of Food and Nutrition, Morioka Junior College, Morioka College, Iwate, Japan, ²Nutrition Section, Totinoki Hospital, Tochigi, Japan

IP01-006 Left Ventricle Compensates for Acute Mild and Moderate increase of Pulmonary artery pressure by Increased Torsion

Eun-Joo Cho¹, Jae-Hyung Kim¹, Panupong Jiamsripong², Anna-M Calleja², Mohsen-A Alharthi², Eileen-M McMahon², Krishnaswamy Chandrasekaran², Bijoy-K Khandheria², Marek Belohlavek²

¹Department of Internal Medicine, Division of Cardiology, Catholic University of Korea, Seoul, Korea, ²Translational Ultrasound Research Laboratory, Division of Cardiovascular Diseases, Mayo Clinic, Scottsdale, Arizona

International Session, Basic 2: (IP02)

13:30-13:55

Chairpersons: Naoki Kashihara (Division of Nephrology, Department of Internal Medicine, Kawasaki Medical School)

IP02-007 Epigenetic transcriptional repression of the human CYP11B2 gene

Masashi Demura, Takashi Yoneda, Hironari Karashima, Yoshiyu Takeda

Division of Endocrinology and Hypertension, Kanazawa University, Kanazawa, Japan

IP02-008 ChREBP promotes ERK phosphorylation through the crosstalk between cyclic mechanical strain and high glucose in rat mesangial cellsJunichi Yatabe^{1,3}, Midori Yatabe^{2,3}, Hironobu Sanada¹, Tsuyoshi Watanabe³¹Division of Health Science Research, Fukushima Welfare Federation of Agricultural Cooperatives, Fukushima, Japan, ²Department of Pharmacology, Fukushima Medical University School of Medicine, Fukushima, Japan, ³Department of Nephrology, Hypertension, Diabetology, Endocrinology and Metabolism, Fukushima Medical University School of Medicine, Fukushima, Japan**IP02-009 Anti-Oxidant or potassium diet could reverse salt-sensitive hypertension via WNK4 regulation**Shengyu Mu¹, Tatsuo Shimosawa², Sayoko Ogura³, Fumiko Mori¹, Hong Wang², Yuzaburo Uetake¹, Toshiro Fujita¹¹Department of Nephrology and Endocrinology, University of Tokyo, Tokyo, Japan, ²Department of Clinical Laboratory, University of Tokyo, Tokyo, Japan, ³Department of Vascular Physiology, National Cardiovascular Center, Osaka, Japan**IP02-010 Oxidative stress in glucocorticoid-induced MR activation**

Hong Wang, Tatsuo Shimosawa, Sayoko Ogura, Fumiko Mori, Yuzaburo Uetake, Shengyu Mu, Hiromitsu Matsui, Toshiro Fujita

Department of Medicine, University of Tokyo, Tokyo, Japan

IP02-011 Urinary Neutrophil Gelatinase-Associated Lipocalin in Diabetic Nephropathy and Hypertension and Its Response to Angiotensin Receptor BlockerKiyoshi Mori¹, Masashi Mukoyama¹, Masato Kasahara¹, Noriko Satoh², Takashige Kuwabara¹, Yoko Saito¹, Hideki Yokoi¹, Hiroataka Imamaki¹, Yoshihisa Ogawa¹, Tomoko Kawanishi¹, Akira Sugawara³, Kazuwa Nakao¹¹Department of Medicine and Clinical Science, Kyoto University Graduate School of Medicine, Kyoto, Japan, ²Clinical Research Institute for Endocrine Metabolic Disease, Kyoto Medical Center, Kyoto, Japan, ³Department of Nephrology, Kyoto Medical Center, Kyoto, Japan**International Session, Clinical 1 (IP03)****13:00-13:30**

Chairpersons: Yasuyuki Nakamura (Kyoto Women's University Faculty of Home Economics Department of Living and Welfare)

IP03-012 Utility and feasibility of a new programmable home blood pressure monitoring device for the assessment of nighttime blood pressure.

Tomoaki Ishigami, Hisako Ushio, Naomi Araki, Shintaro Minegishi, Koichi Tamura, Yoshiyuki Toya, Kazuaki Uchino, Osamu Tochikubo, Satoshi Umemura

Department of Medicine and Cardiorenal Medicine, Yokohama City University Graduate School of Medicine

IP03-013 Hypertension Risk and Atherosclerosis parameter CAVI in Japan and Central EUTomoyuki Yambe¹, Petr Dobsak²¹Tohoku University, Sendai, Japan, ²St. Anna University Hospital, Brno, Czecho Republic**IP03-014 The difference of therapeutic impact according to antihypertensive medicine to central aortic pressure.**Tomoo Furumoto¹, Satoshi Fujii², Hiroyuki Tsutsui¹¹Department of Cardiovascular Medicine, Hokkaido University Graduate School of Medicine, Sapporo, Japan, ²Department of Molecular and Cellular Pathobiology and Therapeutics, Nagoya City University Graduate School of Pharmaceutical Sciences, Nagoya, Japan**IP03-015 Constructing Prediction Models for the Risk of New-onset Hypertension from a Prospective Cohort**Kuo-Liong Chien¹, Hsu Hsiu-Ching², Su Ta-Chen², Chang Wei-Tien³, Chen Pei-Chun⁴, Sung Fung-Chang³, Chen Ming-Fong², Lee Yuan-Teh²¹Institute of Preventive Medicine, National Taiwan University, Taipei, Taiwan, ²Department of Internal Medicine, National Taiwan University Hospital, ³Department of Emergency Medicine, National Taiwan University Hospital, ⁴The Chinese Medical University Hospital

IP03-016 Ambulatory Blood Pressure monitoring by a dual home BP (HBP)/ABP Monitoring Device -Microlife WatchBP O3-

Joji Ishikawa¹, Efthimia Nasothimiou², Nikos Karpettas², Seth Feltheimer³, Scott McDoniel⁴, Joseph Schwartz¹, George Stergiou², Thomas Pickering¹

¹Center for Behavioral Cardiovascular Health, Columbia University Medical Center, NY, USA, ²Hypertension Center, Third University, Department of Medicine, Sotiria Hospital, Athens, Greece, ³Department of Internal Medicine, Columbia University Medical Center, NY, USA, ⁴Microlife Medical Home Solutions, Inc. Golden, CO, USA

IP03-017 Automatic Office Blood Pressure Measurement without doctors or nurses present is Predictive of Ambulatory Blood Pressure-Microlife WatchBP Office-

Joji Ishikawa¹, Efthimia Nasothimiou², Nikos Karpettas², Seth Feltheimer³, Scott McDoniel⁴, Joseph Schwartz¹, George Stergiou², Thomas Pickering¹

¹Center for Behavioral Cardiovascular Health, Columbia University Medical Center, NY, USA, ²Hypertension Center, Third University, Department of Medicine, Sotiria Hospital, Athens, Greece, ³Department of Internal Medicine, Columbia University Medical Center, NY, USA, ⁴Microlife Medical Home Solutions, Inc. Golden, CO, USA

International Session, Clinical 2 (IP04)

13:30-14:00

Chairpersons: Yoshihiko Saito (First Department of Internal Medicine, Nara Medical University)

IP04-018 Irbesartan, through VEGF, regulates cardiac and glomerular angiogenesis of obese and type 2 diabetic db/db mice

Lei Liu¹, Keiichiro Kataoka¹, Taishi Nakamura¹, Masaya Fukuda¹, Hisato Nako¹, Yi fei Dong¹, Yoshiko Tokutomi¹, Hisao Ogawa², Shohei Mitsuyama¹

¹Department of Pharmacology and Molecular Therapeutics, Kumamoto University Graduate School of Medical Sciences, ²Department of Cardiovascular Medicine, Kumamoto University Graduate School of Medical Sciences

IP04-019 Effects of Methylene chloride and Ethyl acetate Fractions Isolated from Rubus coreanum on Catecholamine Secretion in the Adrenal Medulla

Dong-Yoon Lim

Department of Pharmacology (Cardiovasc. Lab), College of Medicine, Chosun University, Gwangju, Korea

IP04-020 Losartan Causes Dual Effects on Catecholamine Release in the Perfused Adrenal Medulla

Dong-Yoon Lim¹, Soon-Pyo Hong²

¹Department of Pharmacology (Cardiovasc. Lab.), College of Medicine, Chosun University, Gwangju, Korea, ²Department of Internal Medicine (Cardiology), College of Medicine, Chosun University, Gwangju, Korea

IP04-021 Correlations between different measures of clinic, home and ambulatory BP in hypertensive patients

Kazuo Eguchi¹, Sujith Kuruvilla², Joji Ishikawa^{1,2}, Gbenga Ogedegbe², William Gerin², Joseph E. Schwartz², Thomas G. Pickering²

¹Division of Cardiovascular Medicine, Department of Medicine, Jichi Medical University School of Medicine, Tochigi, Japan, ²Center for Behavioral Cardiovascular Health, Columbia University Medical Center

IP04-022 Hypertension is a risk factor for depression in young-old female residents in Japan

Shigeto Morimoto¹, Yuko Hamazaki², Kumiko Wakabayashi³, Keiichiro Ishigami¹, Li Zeng¹, Atsumi Mikiko¹, Yumi Koizumi¹, Junta Sakai¹, Hiroshi Yano¹, Takeshi Nakahashi¹, Koshi Nakamura⁴, Kazumi Fukuma², Yuko Morikawa², Tsugiyasu Kanda⁵, Hideaki Nakagawa⁴

¹Department of Geriatric Medicine, Kanazawa Medical University, Uchinada, Ishikawa, Japan

²School of Nursing, Kanazawa Medical University, Uchinada, Ishikawa, Japan

³Regional Comprehensive Support Center of Uchinada Town, Uchinada, Ishikawa, Japan

⁴Department of Epidemiology and Public Health, Kanazawa Medical University, Uchinada, Ishikawa, Japan

⁵Department of Community Medicine, Kanazawa Medical University, Uchinada, Ishikawa, Japan

IP04-023 SNPs in 9p21 locus associated with CAD confirmed by angiography in Japanese

Ada Congrains, Kei Kamide, Tomohiro Katsuya, Ryouusuke Oguro, Izumi Shimaoka, Ken Sugimoto,
Mitsuru Ohishi, Hiromi Rakugi

Department of Geriatric Medicine, Osaka University Graduate School of Medicine

Korea-Japan Joint Hypertension Symposium

14:30-16:30

Chairpersons: **Kazuomi Kario, MD, FACC, FACP, FAHA**
 Chairperson, Japan-Korea Joint Hypertension Organizing Committee, The Japanese Society of Hypertension
 Professor and Chairman, Division of Cardiovascular Medicine Jichi Medical University School of Medicine
Myoung Mook Lee
 Korean Society of Hypertension, Korea

“Current Topics in Hypertension in Asia”

KJS-1 Hypertension and Cerebral Small-Vessel Disease: A New Radiologic Marker?

Seung-Hoon Lee
 Dept. of Neurology, Seoul National University Hospital, Seoul, Korea

KJS-2 Hypertension and Stroke: Clinical Aspects in Japan

Kazuomi Kario, MD, FACC, FACP, FAHA
 Chairperson, Japan-Korea Joint Hypertension Organizing Committee, The Japanese Society of Hypertension
 Professor and Chairman, Division of Cardiovascular Medicine Jichi Medical University School of Medicine

KJS-3 Oxidative stress and its marker, as new and possible biomarkers in various cardiovascular diseases.

Jang-Whan Bae, Yu-Kyung Kim, Il-Ha Jeong, Yeong-Shin Lee, Eun-Joo Choi, Yeong-Jung Kim, Kun-Jae Park, Tae-Jin Shim, Rho-Kwan Park, Sang Yeub Lee, Ki-Seok Kim, Kyung-Kuk Hwang, Dong-Woon Kim, Myeong-Chan Cho
 Division of Cardiology, Department of Cardiology, Chungbuk National University Hospital, Cheongju.

KJS-4 Brain and Renin-Angiotensin System: Insight from Experimental Study

Masaki Mogi
 Department of Molecular Cardiovascular Biology and Pharmacology in Ehime University Graduate School of Medicine, Japan