Various Methods of PV Isolation, the Differences and Influence on Prognosis

**Chairs**

Atsushi Takahashi  
Cardiovascular Center, Yokosuka Kyosai Hospital, Kanagawa, Japan

Motoki Hara  
Department of Cardiology, Higashihiroshima Medical Center, Hiroshima, Japan

**SP1-1** Extensive Encircling Pulmonary Vein Isolation in Patients with Paroxysmal Atrial Fibrillation: Clinical Outcome and Recurrence beyond "Long-term success"

Shinsuke Miyazaki, Makoto Araki, Noboru Ichihara, Takamitsu Takagi, Jin Iwasawa, Akio Kuroi, Hiroaki Nakamura, Hiroshi Taniguchi, Hitoshi Hachiya, Yoshito Iesaka  
Division of Cardiology, Cardiovascular Center, Tsuchiura Kyodo Hospital, Ibaraki, Japan

**SP1-2** Steerable Sheath Has an Huge Impact on Creating Durable Lesion of Pulmonary Vein Isolation (PVAI) and Hence, on the Improvement of Long-term Outcomes

Akira Fukui, Takeshi Tsuchiya, Takanori Yamaguchi, Yasutugu Nagamato, Naohiko Takahashi  
1EP Expert Doctors-Team Tsuchiya, Kumamoto, Japan, 2Department of Cardiology and Clinical Examination, Oita University, Oita, Japan, 3Division of Cardiology, Saga-Ken Medical Centre Koseikan, Saga, Japan

**SP1-3** Randomized comparison of contact force-guided versus conventional circumferential pulmonary vein isolation of atrial fibrillation: Prevalence, characteristics, and predictors of electrical reconnections and the clinical outcome

Kohki Nakamura, Shigeto Naito, Kentaro Minami, Takehito Sasaki, Masahiro Nakano, Eri Goto, Daisuke Kutsuzawa, Yoshiaki Yamaguchi, Suguru Shimizu, Toshiaki Yano, Koji Kumagai, Shigeru Oshima  
Division of Cardiology, Gunma Prefectural Cardiovascular Center, Gunma, Japan

**SP1-4** Contact force-guided radiofrequency versus second-generation cryoballoon pulmonary vein isolation: An impact on early pulmonary vein reconnection and loss of pace capture at pulmonary vein ostium

Yasuhiro Yoshiga, Akihiko Shimizu, Takeshi Ueyama, Makoto Ono, Takayoshi Kato, Tomoko Fumimoto, Hironori Ishiguchi, Masafumi Yano  
The Department of Medicine and Clinical Sciences, Yamaguchi University Graduate School of Medicine, Yamaguchi, Japan, The Division of Health Sciences, Yamaguchi University Graduate School of Medicine, Yamaguchi, Japan
SP1-5  Long-term outcome study of box isolation in atrial fibrillation
Hideko Toyama, Koichiro Kumagai
Heart Rhythm Center, Fukuoka Sanno Hospital, Fukuoka, Japan

SP1-6  A Review of Nine Years' Catheter Ablation Approach for Paroxysmal Atrial Fibrillation in Yokosuka Kyosai Hospital
Kenji Okubo, Taishi Kuwahara, Katsumasa Takagi, Masateru Takigawa, Jun Nakajima, Yasuaki Tanaka, Emiko Nakashima, Kazuya Yamao, Atsushi Takahashi
Cardiovascular Center, Yokosuka Kyosai Hospital, Kanagawa, Japan
Room 1  10:30-12:00 Eiichi Kimura Memorial Lecture [EKL]

Catheter Ablation of Tachyarrhythmias: The Past, Present and Future

Chair  Kazuo Matsumoto
Higashimatsuyama Medical Association Hospital, Saitama, Japan / Cardiology Department of International Medical Center Saitama Medical University, Saitama, Japan

EKL  Catheter Ablation of Tachyarrhythmias: The Past, Present and Future
Hiroshi Nakagawa
University of Oklahoma Health Sciences Center, USA
**Wednesday, 29 July**

**Room 1**  14:30-15:30 Hideo Ueda Memorial Lecture [HUL]

*The Role of J Waves in Inherited Cardiac Sudden Death Syndromes* ★

**Chair**  Hirotugu Atarashi  
*Nippon Medical School Tama Nagayama Hospital, Tokyo, Japan*

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**HUL**  The Role of J Waves in Inherited Cardiac Sudden Death Syndromes

Charles Antzelevitch  
*Lankenau Institute of Medical Research / SUNY Upstate Medical University, USA*
Cohort Study of Arrhythmia in Japan

Chairs
Kazutaka Aonuma
Cardiovascular Division, Graduate School of Comprehensive Human Sciences, University of Tsukuba, Ibaraki, Japan
Kengo Kusano
Cardiovascular Medicine, National Cerebral and Cardiovascular Center, Osaka, Japan

TD1 Clinical Impact of Body Surface Area on the Incidence of Atrial Fibrillation in a Population-based Cohort Study
Takashi Kobayashi1, Yoshihiro Kokubo1, Takuya Watanabe1, Shiro Kamakura2, Kengo Kusano2
1Division of Preventive Cardiology, Department of Internal Medicine, National Cerebral and Cardiovascular Center, Osaka, Japan, 2Division of Cardiology, Department of Internal Medicine, National Cerebral and Cardiovascular Center, Osaka, Japan

TD2 Prognostic impact of supraventricular arrhythmias: From the Ibaraki Prefectural Health Study (IPHS)
Nobuyuki Murakoshi1, Dong-Zhu Xu1, Toshimi Sairenchi2, Miyako Igarashi1, Fujiko Irie1, Takuji Tomizawa1, Hiroyasu Ito5, Iwao Yamaguchi3, Hitoshi Ota6, Kazutaka Aonuma1
1Cardiovascular Division, Faculty of Medicine, University of Tsukuba, Ibaraki, Japan, 2Department of Public Health, Dokkyo Medical University, Tochigi, Japan, 3Department of Health and Welfare, Ibaraki Prefectural Office, Ibaraki, Japan, 4Ibaraki Health Service Association, Ibaraki, Japan, 5Department of Social and Environmental Medicine, Osaka University, Osaka, Japan, 6Ibaraki Health Plaza, Ibaraki Health Service Association, Ibaraki, Japan

TD3 Different Proportion of Patients' Characteristics Between Randomized Clinical Trials and Real World Survey in Japanese Atrial Fibrillation Patients Treated by Warfarin or New Oral Anticoagulants
Yasuo Okumura1, Katsuaki Yokoyama2, Eizo Tachibana3, Kouji Ooiwa4, Toshiaki Kojima5, Ken Arima6, Masayoshi Kofune7, Kazumiki Nomoto8, Masaaki Chiku9, Yasumi Ohno10, Atsushi Hirayama1
1Division of Cardiology, Department of Medicine, Nihon University School of Medicine, Tokyo, Japan, 2Division of Cardiology, Nihon University Hospital, Tokyo, Japan, 3Department of Cardiology, Nihon University Graduate School of Medical Sciences, Tokyo, Japan, 4Department of Cardiology, Kasukabe Municipal Medical Center, Kasukabe, Saitama, Japan, 5Department of Cardiology, Yokohama Social Insurance Hospital, Kanagawa, Japan, 6Department of Cardiology, Sekishin Clinic, Saitama, Japan, 7Department of Cardiology, Kashiwa Municipal Hospital, Chiba, Japan, 8Department of Cardiology, Itabashi Medical Association Hospital, Tokyo, Japan, 9Keio Fuzoku-Clinic, Tokyo, Japan, 10Ohno Medical Clinic, Tokyo, Japan

TD4 Warfarin Control in Japanese May be Different from Caucasian: Study on the Base of Coagulant and Fibrinolytic Markers
Youichi Kobayashi, Akinori Ochi, Koichiro Inokuchi, Yuta Chiba, Yumi Munetsugu, Tatsuya Onuki, Norikazu Watanabe, Yoshino Minoura, Taro Adachi, Taku Asano, Yoshimi Onishi
Division of Cardiology, Department of Medicine, Showa University, Tokyo, Japan
Clinical features and backgrounds of electrical storm associated with acute myocardial infarction—Multi-center registry from Tokyo CCU network—

Yoshinori Kobayashi1, Akira Ueno1, Hiroshige Murata2, Seiji Fukamizu3, Takeshi Sasaki4, Kaoru Tanno5, Norikazu Watanabe5, Ken Nagao6, Takeshi Yamamoto7, Morimasa Takayama8

1Division of Cardiology, Tokai University Hachioji-hospital, Tokyo, Japan, 2Nippon Medical School Tama-Nagayama Hospital, Tokyo, Japan, 3Tokyo Metropolitan Hiroo Hospital, Tokyo, Japan, 4Tokyo Medical and Dental University, Tokyo, Japan, 5Showa University, Tokyo, Japan, 6Nippon University, Tokyo, Japan, 7Nippon Medical School, Tokyo, Japan, 8Sakakibara Heart Institute, Tokyo, Japan
心臓の気持ちになって心電図を読む
座長 山科 章
東京医科大学循環器内科

EC1-1 心電図で見方が変わる急性冠症候群
小菅雅美
横浜市立大学附属市民総合医療センター循環器内科

EC1-2 リズムから読む不整脈の心電図
山根禎一
東京慈恵会医科大学循環器内科

（日本光電工業株式会社）
Room 2  9:00-10:30 Panel Discussion1 [PD1]

Risk Stratification of Syncope ★

Chairs
David G. Benditt
University of Minnesota Medical School, USA
Youichi Kobayashi
Division of Cardiology, Department of Medicine, Showa University School of Medicine, Tokyo, Japan

PD1-1  Key Note Lecture: Syncope Risk Stratification
David G. Benditt
University of Minnesota Medical School, USA

PD1-2  Single Center Experience in Japanese Patients with Syncope
Tatsuya Onuki, Yuya Nakamura, Akinori Ochi, Koichiro Inokuchi, Yuta Chiba, Yumi Munetsugu, Yoshino Minoura, Norikazu Watanabe, Taro Adachi, Mitsuharu Kawamura, Taku Asano, Youichi Kobayashi
Division of Cardiology, Department of Medicine, Showa University School of Medicine, Tokyo, Japan

PD1-3  Comprehensive Risk Stratification of Guidelines-Based Algorithm on a Syncope Clinic
Toshiyuki Furukawa, Tomoo Harada, Yoshihiro Akashi
Division of Cardiology, Department of Internal Medicine, St. Marianna University School of Medicine, Kanagawa, Japan

PD1-4  Paroxysmal Atrioventricular Block Detected by Implantable Loop Recorder in Syncope Patients
Ritsuko Kohno¹, Katsuhide Hayashi², Masao Takahashi², Taichi Watabe³, Hisaharu Ohe³, Yasushi Oginosawa³, Yutaka Otsuji², Haruhiko Abe¹
¹Department of Heart Rhythm Management, University of Occupational and Environmental Health, Fukuoka, Japan, ²Department of Cardiology, University of Occupational and Environmental Health, Fukuoka, Japan

PD1-5  Risk stratification of lethal arrhythmia leading to syncope in patients with vasospastic angina
Mitsuhiro Nishizaki
Department of Cardiology, Yokohama Minami Kyosai Hospital, Kanagawa, Japan
Room 2  10:30-12:00 Panel Discussion2 [PD2]

Diagnosis to Treatment of Idiopathic Ventricular Tachycardia Originating from Left Ventricle

Chairs  Akihiko Nogami  
Cardiology Division, University of Tsukuba, Ibaraki, Japan  
Yoshinori Kobayashi  
Department of Cardiology, Tokai University Hachioji Hospital, Tokyo, Japan

PD2-1  Purkinje-related Ventricular Tachycardia  
Akihiko Nogami  
Cardiology Division, University of Tsukuba, Ibaraki, Japan

PD2-2  Idiopathic mitral annular ventricular tachycardia: Diagnosis and treatment  
Hiroshi Tada  
Department of Cardiovascular Medicine, Faculty of Medical Sciences, University of Fukui, Fukui, Japan

PD2-3  Idiopathic Ventricular Arrhythmia Originating from the Cardiac Crux or Inferior Septum—An Epicardial Idiopathic Ventricular Arrhythmia—  
Mitsuharu Kawamura, Youichi Kobayashi  
Division of Cardiology, Department of Medicine, Showa University School of Medicine, Tokyo, Japan

PD2-4  Electrocardiographic and Electrophysiological Characteristics in Idiopathic Ventricular Arrhythmias Originating from the Papillary Muscles in the Left Ventricle  
Naoki Yoshida  
Department of Advanced Cardiovascular Therapeutics, Nagoya University Graduate School of Medicine, Aichi, Japan
Simple anticoagulation science for NOAC therapy
- challenging to elucidate advantages of Edoxaban -

Chair  Youichi Kobayashi
Division of Cardiology, Department of Medicine, Showa University School of Medicine, Tokyo, Japan

LS2-1 Simple anticoagulation science for NOAC therapy
- challenging to elucidate advantages of Edoxaban -
Masahiro Ieko
Department of Internal Medicine, School of Dentistry, Health Sciences University of Hokkaido, Hokkaido, Japan

(DAIICHI SANKYO COMPANY, LIMITED)
Room 2  14:30-16:30 JHRS-JSE-JSTH Joint Symposium [JSJ]

Progress in Antithrombotic Therapy

Opening Remarks
Ken Okumura
Department of Cardiology, Hirosaki University Graduate School of Medicine, Aomori, Japan

Session 1 (Basic Research)

Chairs
Hideo Mitamura
Tachikawa Hospital, Tokyo, Japan
Kazutaka Aonuma
Cardiovascular Division, Graduate School of Comprehensive Human Sciences, University of Tsukuba, Ibaraki, Japan

JSJ1 Mechanisms of arterial and venous thrombus formation
Yujiro Asada
Department of Pathology, University of Miyazaki, Miyazaki, Japan

JSJ2 Anticoagulant mechanisms of oral anticoagulants in cell-based coagulation reactions
Masahiro Ieko
Department of Internal Medicine School of Dentistry, Health Sciences University of Hokkaido, Hokkaido, Japan

Session 2 (Clinical Trial)

Chairs
Tetsuhito Kojima
Nagoya University Graduate School of Medicine, Aichi, Japan
Isao Kitajima
Department of Clinical Laboratory and Molecular Pathology, Graduate School of Medicine and Pharmaceutical Science for Research, University of Toyama, Toyama, Japan

JSJ3 Periprocedural Anticoagulation Management with Novel Oral Anticoagulation Drugs (NOAC)
Kyoko Soejima
Department of Cardiology, Kyorin University Hospital, Tokyo, Japan

JSJ4 Issues and Future Solutions in Cardiogenic Stroke Prevention
Takeshi Yamashita
The Department of Cardiovascular Medicine, The Cardiovascular Institute, Tokyo, Japan
Closing Remarks
Yukio Ozaki
Department of Clinical and Laboratory Medicine, Faculty of Medicine, University of Yamanashi, Yamanashi, Japan

(DAIICHI SANKYO CO., LTD.)
Room 2 16:30-18:00 10th Tawara-Aschoff Symposium [TAS]

★

Chairs

Kozo Suma
Tokyo Women’s Medical University, Tokyo, Japan

Kan Takayanagi
Kasukabe Kosei Hospital, Saitama, Japan

TAS1

Boris Schmidt
Cardioangiologisches Centrum Bethanien, Germany

TAS2

Christopher Piorkowski
Heart Center Dresden University, Germany

TAS3

Cardiac Rehabilitation in Japan and Germany

Shigeru Makita
Department of Cardiac Rehabilitation, Saitama International Medical Center, Saitama Medical University, Saitama, Japan

TAS4

Left atrial voltage map by multipolar catheter after atrial fibrillation ablation decreased recurrence of atrial fibrillation in patients of persistent atrial fibrillation

Norikazu Watanabe, Kou Ogawa, Yuuya Nakamura, Kouichirou Inoguchi, Akinori Ochi, Yuuta Chiba, Yumi Munetsugu, Yoshino Minoura, Taro Adachi, Mitsuharu Kawamura, Taku Asano, Kaoru Tanno, Youichi Kobayashi
Department of Cardiology, Showa University School of Medicine, Tokyo, Japan

TAS5

Minimizing ventricular pacing: Is it the right choice for all patients?

Giovanni Luca Botto
Sant’ Anna Hospital, Italy
Device Infection and Lead Extraction—The Status Quo and Progress in Japan— ★

Chairs
Taijiro Sueda
Department of Cardiovascular Surgery, Hiroshima University Graduate School of Medicine, Hiroshima, Japan
Yuji Nakazato
Department of Cardiology, Juntendo University Urayasu Hospital, Chiba, Japan

SP2-1 Key Note Lecture
Oussama Wazni
Cleveland Clinic, USA

SP2-2 Role of the cardiac surgeon for lead extraction of CIEDs
Katsuhiko Imai
Department of Cardiovascular Surgery, Hiroshima University Hospital, Hiroshima, Japan

SP2-3 Device infection and lead extraction—The status quo and progress in Japan—
Masahiko Goya
Heart Rhythm Center, Tokyo Medical and Dental University, Tokyo, Japan

SP2-4 Current status of laser lead extraction in Japan
Hideo Okamura
Division of Cardiovascular Medicine, National Cerebral and Cardiovascular Center, Osaka, Japan

SP2-5 Hybrid lead extraction with both transvenous and surgical methods
Nobuhiro Nishii
Department of Cardiovascular Therapeutics, Okayama University Graduate School of Medicine, Dentistry, and Pharmaceutical Sciences, Okayama, Japan

SP2-6 Lead extraction and vegetation removal by non-laser techniques
Morio Shoda
Department of Cardiology, Tokyo Women's Medical University, Tokyo, Japan
Room 3  10:30-12:00 Panel Discussion3 [PD3]

Strategy of Heart Failure Treatment ★

Chairs
Shunei Kyo
Tokyo Metropolitan Geriatric Hospital and Institute of Gerontology, Tokyo, Japan
Hiroshi Ito
Department of Cardiovascular Medicine, Okayama University, Okayama, Japan

PD3-1 How to optimize guideline-directed medical therapy in patients with heart failure?
Koichiro Kinugawa
The Department of Therapeutic Strategy for Heart Failure, The University of Tokyo, Tokyo, Japan

PD3-2 Impact of neuromodulation in heart failure
Kenji Sunagawa
Department of Therapeutic Regulation of Cardiovascular Homeostasis, Center for Disruptive Cardiovascular Medicine, Kyushu University, Fukuoka, Japan

PD3-3 Oussama Wazni
Cleveland Clinic, USA

PD3-4 Strategy of Heart Failure Treatment: LVAD
Michael R. Gold
Medical University of South Carolina, USA
Atrial Fibrillation-Scientific Update-
Lack of Evidence for Rotors in Humans & Therapeutic Implications ★

Chair  Wataru Shimizu  
Department of Cardiovascular Medicine, Nippon Medical School, Tokyo, Japan

LS3-1 Atrial Fibrillation-Scientific Update-
Lack of Evidence for Rotors in Humans & Therapeutic Implications

Kalyanam Shivkumar  
UCLA Cardiac Arrhythmia Center, USA

(NIHON KOHDEN Corporation)
EP（デバイス植え込み、アブレーション）に業者の立会いは必要である

座長 鈴木 誠
亀田総合病院循環器内科

MD1-1 賛成
矢島真知子
琉球大学医学部付属病院ME機器センター

MD1-2 反対
徳井研太
埼玉医科大学総合医療センターMEサービス部
アブレーション1（メディカルプロフェッショナル）

座長 大友建一郎
青梅市立総合病院 循環器内科
縮 恭一
筑波大学附属病院医療機器管理センター

M1-1 Cryo-Ablationによる肺静脈-左房間の電気的隔離に関与する冷却パラメータの検討
高橋泰輝1, 森田典成2, 三浦 歩2, 永田吾一2, 谷本 直2, 川俣郁夫2, 飯田剛幸3, 上野 亮3, 小林義典3
1東海大学医学部附属八王子病院, 2東海大学医学部附属八王子病院診療協力部臨床工学技術科, 3筑波大学医学部附属八王子病院循環器内科

M1-2 Cryoballoonアブレーションにおけるバルーン温度と食道温度に関する検討
藤巻愛子1, 佐々木毅2, 土井房恵1, 東本 豊1, 黒沢昌子1, 倉田直樹1, 西村卓郎2, 白井康大2, 田尾 进2, 壟川正晃2, 川端美穂子2, 合屋雅彦2, 平尾貞三1
1東京医科歯科大学医学部附属病院MEセンター, 2東京医科歯科大学医学部附属病院不整脈センター

M1-3 発作性心房細動に対する経皮的カテーテル心筋冷凍焼灼術の治療効果の検討
縮 恭一1, 鳥羽清倉1, 坂元雄介1, 山本純偉1, 梅津 努2, 黒木健志3, 五十嵐都3, 関口幸夫3, 野上昭彦1, 青沼和隆3
1筑波大学附属病院医療機器管理センター, 2筑波大学附属病院看護部, 3筑波大学医学医療系循環器内科

M1-4 心房細動アブレーションにおける食道温モニタリング管理下での食道-左房後壁接觸領域の通電と胃腸蠕動運動障害との関連
三浦 歩1, 森田典成2, 高橋泰輝1, 永田吾一1, 谷本 直2, 飯田剛幸2, 橋田匡史2, 藤林大輔2, 上野 亮2, 小林義典2
1東海大学医学部付属病院臨床工学技術科, 2東海大学医学部付属病院循環器内科

M1-5 心房中隔起源の嚥下誘発性心房頻拍に対してカテーテルアブレーション治療が有効であった1例
新保里佳1, 中島基裕1, 堀口敦史1, 伊藤さやか1, 枡口知之1, 春田良雄1, 長内宏之2
1公立陶生病院臨床工学部, 2公立陶生病院循環器内科
デバイス（メディカルプロフェッショナル）

座長：大森裕也
日本医科大学 心臓血管外科
橋本賢一
防衛医科大学校 集中治療部

M2-1 条件付きMRI対応ベースメーカMRI施行後のパラメータ経時変化について
関川翔太1, 大本夏南1, 竹谷秋浩1, 下重悠幸1, 山本均美2, 齋藤礼衣2
1釧路孝仁会記念病院臨床工学科, 2釧路孝仁会記念病院循環器内科

M2-2 植込み型除細動器で検出された心室細動の平均心拍数についての検討
菊池佳峰1, 木田博太1, 祐 桃菜1, 小西一樹1, 岡山広司1, 伊藤優美1, 森本良平1, 佐藤伸宏1, 上野和夫1, 古川真登1, 山田真理2, 福並正和2
1大阪府立急性期・総合医療センター医療技術部臨床工学室, 2大阪府立急性期・総合医療センター心臓内科

M2-3 右室中隔ペーシングの三尖弁逆流への影響（心尖部ペーシングとの比較）
内山博子1, 田川 実2, 大矢佳奈1, 佐藤真理子1, 落合幸江2, 中村裕一2, 池主雅臣2
1長岡中央総合病院検査科, 2長岡中央総合病院循環器内科, 3新潟大学医学部保健学科

M2-4 CRT-D植込み術中に2D心エコーを用いた左室収縮最遅延部位の同定が心臓再同期療法に対し有用であった1例
辻本経史
医療法人医仁会武田総合病院臨床工学科

M2-5 房室伝導監視型心室ペーシング抑制機能付きベースメーカにおけるペーシングモード切替の要因についての検討
中嶋 勉1, 安藤かおり1, 前田 恒1, 木内聡子1, 角田卓哉1, 大澤達哉1, 栗原里佳1, 安野 誠1, 佐々木健士1, 中村恵美1, 熊谷浩司1, 内藤滋人2, 大島 茂1
1群馬県立心臓血管センター技術部臨床工学課, 2群馬県立心臓血管センター循環器内科

M2-6 Brugada症候群患者のICD植込み後の生活環境変化についての調査
増田愛子1, 井上完起1, 矢川真弓子2, 三村倫子1, 望月由香1, 前田友未1, 宇都宮淑絵1, 辻 孝子1, 三浦雅郁子1, 梅村 純1, 友池仁暢2
1公益財団法人日本心臓血管研究振興会附属柳原記念病院看護部, 2公益財団法人日本心臓血管研究振興会附属柳原記念病院循環器内科
Wednesday, 29 July

Room 4  9:00-10:30 Symposium3 [SP3]

Progress of Research on the QT Prolongation ★

Chairs
Naohiko Takahashi
Department of Cardiology and Clinical Examination, Faculty of Medicine, Oita University, Oita, Japan
Kengo Kusano
Cardiovascular Medicine, National Cerebral and Cardiovascular Center, Osaka, Japan

SP3-1 Key Note Lecture: Impact of Genetics on the Clinical Management of the Long QT Syndrome
Peter J. Schwartz
IRCCS Istituto Auxologico Italiano, Italy

SP3-2 Comorbid epilepsy and developmental disorder in congenital long QT syndrome with perinatal arrhythmia
Aya Miyazaki¹, Heima Sakaguchi¹, Takeshi Aiba², Akira Kumakura³, Yoshihiro Miyamoto⁴, Kengo Kusano⁵, Wataru Shimizu⁶, Hideo Ohuchi⁷
¹Department of Pediatric Cardiology, National Cerebral and Cardiovascular Center, Osaka, Japan, ²Department of Cardiovascular Medicine, Division of Arrhythmias and Electrophysiology, National Cerebral and Cardiovascular Center, Osaka, Japan, ³Department of Pediatrics, Kitano Hospital, The Tazuke Kofukai Medical Research Institute, Osaka, Japan, ⁴Department of Preventive Cardiology, Department of Preventive Medicine and Epidemiologic Informatics, National Cerebral and Cardiovascular Center, Osaka, Japan

SP3-3 QT dynamics during the post-exercise face immersion for the long-QT syndrome type 3
Kazuhiro Takahashi
Pediatric Cardiology Okinawa Children’s Medical Center, Okinawa, Japan

SP3-4 The Impact of Elevation of the Sympathetic Activity by Abrupt Starting Exercise Protocol in Patients with Congenital Long QT Syndrome
Motomi Tachibana¹, Hiroki Sugiyama¹, Hiroshi Morita¹, Nobuhiro Nishii², Kazufumi Nakamura², Satoshi Nagase³, Tohru Ohe³, Hiroshi Ito³
¹Department of Cardiovascular Medicine, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama, Japan, ²Department of Cardiovascular Therapeutics, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama, Japan, ³Department of Cardiology, Sakakibara Heart Institute of Okayama, Okayama, Japan

SP3-5 Mechanisms of fever-induced QT prolongation in patients with KCNH2 mutations in the S5-pore region
Kenshi Hayashi¹, Tadashi Nakajima¹, Shoichi Tange¹, Noboru Fujino¹, Toyonobu Tsuda¹, Yoshihiro Tanaka¹, Yoshiaki Kaneko², Masahiko Kurabayashi², Masakazu Yamagishi³
¹Division of Cardiovascular Medicine, Kanazawa University Graduate School of Medical Science, Ishikawa, Japan, ²Department of Medicine and Biological Science, Gunma University Graduate School of Medicine, Gunma, Japan, ³Department of Cardiovascular Medicine, Maebashi Red Cross Hospital, Gunma, Japan
QT intervals during sleeping and around wake-up periods in school-aged patients with long QT syndrome and age-matched healthy controls

Masao Yoshinaga¹, Hitoshi Horigome², Hiroya Ushinohama³, Seiko Ohno⁴

¹Department of Pediatrics, National Hospital Organization Kagoshima Medical Center, Kagoshima, Japan, ²Department of Child Health, Faculty of Medicine, University of Tsukuba, Ibaraki, Japan, ³Department of Cardiology, Fukuoka Children’s Hospital and Medical Center for Infectious Diseases, Fukuoka, Japan, ⁴Department of Cardiovascular and Respiratory Medicine, Shiga University of Medical Science, Shiga, Japan
Wednesday, 29 July

Room 4  10:30-12:00 Symposium4 [SP4]

Sinoatrial Node Pacemaker Activity—The Mechanism of Heart Beats—

Chairs  Haruaki Nakaya  
Chiba University, Chiba, Japan  
Nobuhisa Hagiwara  
Department of Cardiology, Tokyo Women’s Medical University, Tokyo, Japan

SP4-1  Ca and K channels in cardiac pacemaker activity  
Kyoichi Ono, Takeshi Adachi, Takayoshi Ohba  
The Department of Cell Physiology, Akita University Graduate School of Medicine, Akita, Japan

SP4-2  Controversy still goes on; Lessons from HCN4 knock-out mice  
Makoto Takano¹, Yuko Kozasa¹, Mitsue Takeya¹, Kensuke Ohshita¹, Masayuki Ito¹,  
Keiko Ishihara¹, Noriyuki Nakashima³  
¹Department of Physiology, Kurume University School of Medicine, Fukuoka, Japan, ²Department of Anesthesiology, Kurume University School of Medicine, Fukuoka, Japan, ³Department of Neurobiology, Kyoto University Graduate School of Medicine, Kyoto, Japan

SP4-3  Mathematical model of cardiac pacemaker activity  
Akinori Noma, Yukiko Himeno  
Department of Bioinformatics, College of Life Sciences, Ritsumeikan University, Shiga, Japan

SP4-4  Spontaneous activity of pulmonary vein myocardial sleeves  
Haruo Honjo  
Research Institute of Environmental Medicine, Nagoya University, Aichi, Japan

SP4-5  Biological Pacemaker Created by HCN4-overexpressing Mouse Embryonic Stem Cell-derived Cardiomyocytes  
Kazufumi Nakamura, Yukihiro Saito, Hiroki Sugiyama, Hiroshi Morita, Hiroshi Ito  
Department of Cardiovascular Medicine, Okayama University, Okayama, Japan
New System for Ultra High-Resolution Mapping in Patients with Complex Atrial and Ventricular Tachycardia ★

Chair  Teiichi Yamane
Division of Cardiology, Jikei University School of Medicine, Tokyo, Japan

LS4-1  New System for Ultra High-Resolution Mapping in Patients with Complex Atrial and Ventricular Tachycardia

Pierre Jais
Rhythmology & Cardiac Stimulation Department, Centre Hospitalier Universitaire de Bordeaux, France

(Boston Scientific Japan)
**Time for a multidisciplinary approach for treatment of Sleep Breathing Disorders in cardiovascular patients. Why should we all care about Sleep Apnea? ★**

**Chair**  
Shinichi Momomura  
Cardiovascular Department, Saitama Medical Center, Jichi Medical University, Saitama, Japan

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**TS2-1**  
Time for a multidisciplinary approach for treatment of Sleep Breathing Disorders in cardiovascular patients. Why should we all care about Sleep Apnea?

Gianluca Botto  
President of AIAC (Italian Heart Rhythm Association) / Head of Electrophysiology, Sant’Anna Hospital Como, Italy

(Japan Lifeline Co., Ltd.)
Current Status of Treatment of Complex Ventricular Arrhythmias

**Chairs**

Hugh Calkins  
The Johns Hopkins University, USA

Hiroshi Nakagawa  
University of Oklahoma Health Sciences Center, USA

**JHJ1**  
Discrete Prepotential as an Indicator of Successful Ablation in Patients With Coronary Cusp Ventricular Arrhythmia

Hitoshi Hachiya¹, Kenzo Hirao², Yoshito Iesaka¹  
¹Department of Cardiology, Cardiovascular Center, Tsuchiura Kyodo Hospital, Ibaraki, Japan, ²Heart Rhythm Center, Tokyo Medical and Dental University, Tokyo, Japan

**JHJ2**  
Treatment of ventricular arrhythmias in patients with sarcoidosis

Yukio Sekiguchi, Akihiko Nogami, Kazutaka Aonuma  
Cardiovascular Division, Faculty of Medicine, University of Tsukuba, Ibaraki, Japan

**JHJ3**  
Approach to Treatment of Patients with ARVD/C

Hugh Calkins  
The Johns Hopkins University, USA

**JHJ4**  
ICD Therapy of Ventricular Arrhythmias in Patients with Non-Ischemic Cardiomyopathy

Michael R. Gold  
Medical University of South Carolina, USA
**Wednesday, 29 July**

**Room 5  9:00-9:50 Oral Presentation [O1]**

**AF Ablation 1**

**Chairs**

Osamu Igawa  
*Department of Internal Medicine and Cardiology, Nippon Medical School Tama Nagayama Hospital, Tokyo, Japan*

Takehiko Keida  
*Department of Cardiology, Edogawa Hospital, Tokyo, Japan*

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**O1-1**  
**The Effect of Residual Intrinsic Ganglionated Plexi on Pulmonary Vein Arrhythmogenisity and Their Clinical Implication in Patients with Atrial Fibrillation**

Toshiya Kurotobi, Naoto Kino, Takao Tsuchida, Masataka Yoshida, Yoshihisa Shimada  
*Cardiovascular Division, Shiroyama Hospital, Osaka, Japan*

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**O1-2**  
**Ganglionated Plexus Ablation Improves Sleep-Disordered Breathing**

Shinji Mito, Yuji Muraoka, Yuto Fujii, Tasuku Higashihara, Naoya Hironobe, Yuso Kagawa, Kenichi Yamane, Tomoharu Kawase, Hiromichi Tamekiyo, Masaya Otsuka, Tomokazu Okimoto, Yoshiko Masaoka, Nobuo Shioide, Yasuhiro Hayashi  
*Tsuchiya General Hospital, Hiroshima, Japan*

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**O1-3**  
**Importance of Detailed High-Dense GP Ablation and Clinical Implication of 2nd GP Ablation in Recurred Patients with Atrial Fibrillation**

Norishige Morita, Takayuki Iida, Tadashi Hashida, Daisuke Fujibayashi, Akiko Ushijima, Akira Ueno, Yoshinori Kobayashi  
*Division of Cardiology, Department of Medicine, Tokai University Hachioji Hospital, Tokyo, Japan*

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**O1-4**  
**Localization of Right Atrial Ganglionated Plexi in Patients with Atrial Fibrillation**

Mitsuaki Itoh, Kohei Yamashiro, Daisuke Yoshimoto, Kazuto Kujira, Masanao Takeya, Koyo Sato, Yujiro Sakamoto, Takahiko Suzuki  
¹Department of Cardiovascular Medicine, Toyohashi Heart Center, Aichi, Japan, ²Department of Cardiovascular Medicine, Nagoya Heart Center, Aichi, Japan
AF Ablation 2

Chair: Kikuya Uno
Sapporo Cardiovascular Center / Heart Rhythm Center, Hokkaido, Japan
Koichi Inoue
Cardiovascular Center, Sakurabashi Watanabe Hospital, Osaka, Japan

O2-1 Chemical ablation to vein of Marshall reduces the rise of esophageal temperature
Masaki Fujita1, Masaya Nakata1, Tatsuya Yamashita1, Kazunobu Iidaka1, Toshiya Chinen1, Tatsuo Kikuchi1, Kentaro Meguro1, Takehiko Keida1, Hiroshi Ohira1, Kaoru Okishige2
1Department of Cardiology, Edogawa Hospital, Tokyo, Japan, 2Department of Cardiology, Minato Sekijuji Hospital, Kanagawa, Japan

O2-2 Chemical ablation to the Vein of Marshall: Favorable Adjunctive Effects to Left Pulmonary Vein Isolation
Takehiko Keida1, Kazunobu Iidaka1, Masaya Nakata1, Tatsuya Yamashita1, Masaki Fujita1, Toshiya Chinen1, Tatsuo Kikuchi1, Kentaro Meguro1, Hiroshi Ohira1, Mitsuaki Takami1, Kaoru Okishige3
1Department of Cardiology, Edogawa Hospital, Tokyo, Japan, 2Department of Cardiology, Owaki Hospital, Tokyo, Japan, 3Department of Cardiology, Yokohama City Minato Red Cross Hospital, Kanagawa, Japan

O2-3 A case of marshall bundle reentry atrial tachycardia
Shingo Narita, Shinji Kaneko, Tomoaki Haga, Masaya Fujita, Taiki Ohashi, Ryuji Kubota, Masanori Shinoda
Toyota Kosei Hospital, Aichi, Japan

O2-4 Efficacy of ethanol infusion in the vein of Marshall in cases with incomplete mitral isthmus block after radiofrequency catheter ablation
Department of Cardiovascular Medicine, Nara Prefecture Western Medical Center, Nara, Japan

O2-5 Positional relationship between the vein of Marshall, coronary sinus and esophagus
Takehiko Keida1, Kazunobu Iidaka1, Masaya Nakata1, Tatsuya Yamashita1, Masaki Fujita1, Toshiya Chinen1, Tatsuo Kikuchi1, Kentaro Meguro1, Hiroshi Ohira1, Mitsuaki Takami1, Kaoru Okishige3
1Department of Cardiology, Edogawa Hospital, Tokyo, Japan, 2Department of Cardiology, Owaki Hospital, Tokyo, Japan, 3Department of Cardiology, Yokohama City Minato Red Cross Hospital, Kanagawa, Japan
Spectral analysis following ethanol injection in the vein of Marshall in patients with persistent atrial fibrillation

Kazuo Kato¹, Ryosuke Kametani¹, Akimitsu Tanaka¹, Masanari Sugawara¹, Hirotaka Otake¹, Shingo Yoshioka¹, Takashi Shimozato¹, Norihisa Shibata², Shuji Sugahara², Toshihiro Yokoi², Hideki Wada²

¹Cardiology, Nagoya Tokushukai General Hospital, Aichi, Japan, ²Clinical Engineering, Nagoya Tokushukai General Hospital, Aichi, Japan
AF Ablation 3

Chairs
Kohei Yamashiro
Heart Rhythm Center, Takatsuki General Hospital, Osaka, Japan
Norishige Morita
Division of Cardiology, Department of Medicine, Tokai University Hachioji Hospital, Tokyo, Japan

O3-1 Impact of encircling ipsilateral pulmonary vein isolation using the real-time automated 'VISITAG' annotation algorithm: A single-center, case-control comparative study
Masahiro Esato¹, Naoto Nishina¹, Yoshitomi Kida¹, Yeong-Hwa Chun¹
¹Department of Arrhythmia, Iijinkai Takeda General Hospital, Kyoto, Japan, ²Takeda Hospital, Arrhythmia Care Center, Kyoto, Japan

O3-2 Appropriate Contact Force during Ipsilateral Pulmonary Vein Isolation for Clinical Benefit on Mid-term Outcome
Tomoko Fumimoto¹, Yasuhiro Yoshiga¹, Akihiko Shimizu¹, Takeshi Ueyama¹, Makoto Ono¹, Takayoshi Kato¹, Hirotomo Ishiguchi¹, Masafumi Yano¹
¹Department of Medicine and Clinical Science, Yamaguchi University Graduate School of Medicine, Yamaguchi, Japan, ²Faculty of Health Science, Yamaguchi University Graduate School of Medicine, Yamaguchi, Japan

O3-3 Whether the Assessment of the Contact Force would be Useful to Atrial Fibrillation Ablation using the Dragging Technique?
Hiroki Kamiya, Yukihiko Yoshida, Ayumi Ito, Ryo Watanabe, Natsu Sekioka, Yu Mori, Monami Ando, Mayuho Maeda, Hirohiko Suzuki, Yasuhiro Ogura, Yutaka Aoyama, Mamoru Nanasato, Haruo Hirayama
Cardiovascular Center, Nagoya Daini Red Cross Hospital, Aichi, Japan

O3-4 Catheter Stability Setting of Visitag Module in CARTO 3 System is Dependent on the Target Contact Force
Kazuki Iso¹, Yasuo Okumura¹, Ichiro Watanabe¹, Koichi Nagashima¹, Kazumasa Sonoda¹, Rikitake Kogawa¹, Naoko Sasaki¹, Keiko Takahashi¹, Sayaka Kurokawa¹, Shiro Nakahara², Yuichi Hori², Atsushi Hirayama³
¹Division of Cardiology, Department of Medicine, Nihon University School of Medicine, Tokyo, Japan, ²Department of Cardiology, Dokkyo Medical University Koshigaya Hospital, Saitama, Japan
Effect of adaptive servo-ventilation on catheter contact force during pulmonary vein isolation

Iwanari Kawamura1, Rintaro Hojo1, Kiyotaka Yoshida1, Satoshi Miyazawa1, Akihiro Nakada1, Yuichi Moriyama1, Ken Arai1, Toshiki Kaihara1, Motohiro Asaki1, Takeshi Kitamura1, Yuya Aoyama1, Kota Komiyama1, Seiji Fukamizu1, Tamotsu Tejima1, Mitsuhiro Nishizaki2, Masayasu Hiraoka4, Harumizu Sakurada2

1Cardiology, Hiroo Metropolitan Hospital, Tokyo, Japan, 2Cardiology, Tokyo Metropolitan Health and Medical Treatment Corporation Ohkubo Hospital, Tokyo, Japan, 3Cardiology, Yokohama Minami Kyousai Hospital, Kanagawa, Japan, *Director Health Examination, Toride Kitasohma Medical Center Hospital, Ibaraki, Japan
Room 5  12:10-13:10 Luncheon Seminar5 [LS5]

The effects of nifekalant and amiodarone in shock-resistant CPA patients

Chair  Takashi Kurita  
Division of Cardiovascular Center, Department of Internal Medicine, Kinki University, Osaka, Japan

LS5-1  The effects of nifekalant and amiodarone in shock-resistant CPA patients  
Mari Amino  
Department of Cardiovascular Medicine, Tokai University School of Medicine, Kanagawa, Japan

(TOA EIYO LTD.)
Room 5  |  14:30-15:30 Oral Presentation [O4]

VT 1

**Chairs**

Yukiko Nakano  
*Department of Cardiovascular Medicine, Hiroshima University, Hiroshima, Japan*

Masahiko Goya  
*Department of Cardiology, Tokyo Medical and Dental University, Tokyo, Japan*

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**O4-1 Changes in the J-wave during the treadmill exercise test**

Minoru Tagawa¹, Yukie Ochiai¹, Yuichi Nakamura¹, Masaomi Chinushi², Yoshifusa Aizawa³  
¹*Department of Cardiology, Nagaoka Chuo General Hospital, Niigata, Japan*, ²*Graduate School of Health Science, Niigata University, Niigata, Japan*, ³*Department of Cardiology, Tachikawa General Hospital, Niigata, Japan*

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**O4-2 J-point Elevation as a Predictor of Malignant Ventricular Arrhythmia Triggered by Premature Ventricular Contractions with Right Bundle Branch Block and Superior Axis**

Yumi Munetsugu, Mitsuharu Kawamura, Yuya Nakamura, Akinori Ochi, Koichiro Inokuchi, Yuta Chiba, Tatsuya Onuki, Yoshino Minoura, Norikazu Watanabe, Taro Adachi, Taku Asano, Youichi Kobayashi  
*Division of Cardiology, Department of Medicine, Showa University School of Medicine, Tokyo, Japan*

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**O4-3 Relationship between J wave and ventricular fibrillation caused by coronary spastic angina**

Akinori Matsumoto¹, Akihiro Yoshida¹, Koji Fukuzawa¹, Tomoyuki Nakanishi¹, Soichiro Yamashita¹, Hiroki Konishi¹, Hirotsushi Ichibori¹, Hiroshi Imada¹, Kiyohiro Hyogo¹, Kenichi Hirata¹, Hiroki Shimizu², Yoshio Onishi²  
¹*Department of Internal Medicine, Division of Cardiovascular Medicine, Kobe University Graduate School of Medicine, Hyogo, Japan*, ²*Kakogawa East Hospital, Hyogo, Japan*

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**O4-4 Long-term effect of cilostazol on recurrent ventricular fibrillation related to Brugada syndrome**

Tetsuji Shinohara, Takanori Yamaguchi, Reika Ayabe, Yuumi Ishii, Toyokazu Ootsubo, Norihiro Okada, Kunio Yufu, Mikiko Nakagawa, Naohiko Takahashi  
*Department of Cardiology and Clinical Examination, Faculty of Medicine, Oita University, Oita, Japan*

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**O4-5 Ventricular Tachycardia in a patient with hyperkalemia and coved ST-segment elevation in the inferior leads**

Ai Hattori¹, Masayuki Igawa¹, Satoshi Aita³, Tsuyoshi Enomoto³, Kazutaka Aonuma²  
¹*Department of Cardiology, Tsukuba Memorial Hospital, Ibaraki, Japan*, ²*Cardiovascular Division, Institute of Clinical Medicine, Graduate School of Comprehensive Human Sciences, University of Tsukuba, Ibaraki, Japan*
Room 5 | 15:30-16:30 Oral Presentation [O5]

VT 2

**Chairs**

Tomoo Harada  
*Department of Cardiology, St. Marianna University School of Medicine, Kanagawa, Japan*

Mitsuharu Kawamura  
*Division of Cardiology, Department of Medicine, Showa University School of Medicine, Tokyo, Japan*

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**O5-1**

**Idiopathic left ventricular arrhythmias in patients with atrioventricular nodal reentrant tachycardia: The incidence and electrophysiologic characteristics**

Kaori Hisazaki, Kenichi Kaseno, Naoki Amaya, Daisetsu Aoyama, Kanae Hasegawa, Yuichiro Shiomi, Naoto Tama, Hiroyuki KIkeda, Takehiko Sato, Yoshitomo Fukuoka, Tetsuji Morishita, kenaro Ishida, Hiroyasu Uzui, Kenji Kurosaki, Akihiko Nogami, Hiroshi Tada

1*Department of Cardiovascular Medicine, Faculty of Medical Sciences, University of Fukui, Fukui, Japan, 2*Department of Cardiovascular Medicine, Yokohama Rosai Hospital, Kanagawa, Japan, 3*Department of Cardiovascular Medicine, University of Tsukuba, Ibaraki, Japan*

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**O5-2**

**The Isochronal Map of Non-Contact Mapping System is Useful to Distinguish the Right or Left Outflow Tract Origin of Idiopathic Ventricular Arrhythmias**

Kazuo Miyazawa, Marehiko Ueda, Masayuki Ishimura, Takatsugu Kajiyama, Naotaka Hashiguchi, Yoshio Kobayashi

*Department of Cardiovascular Medicine, Chiba University Graduate School of Medicine, Chiba, Japan*

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**O5-3**

**Successful radiofrequency catheter ablation of ventricular premature contractions originating in the vicinity of the His bundle in four patients**

Noriyuki Ohashi, Satoki Fujii, Masatomo Ozaki, Mitsuuru Yoshino, Yoji Okamoto, Hiroshi Tasaka, Kazushige Kadota, Kazuaki Mitsudo

*Department of Cardiology, Kurashiki Central Hospital, Okayama, Japan*

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**O5-4**

**Catheter ablation of ventricular arrhythmia originating from the aortic sinus cusp: A safe distance between ablation catheter and coronary artery ostium**

Emi Nakano, Tomoo Harada, Yui Nakayama, Yasushi Takagi, Marika Yamada, Makoto Takano, Toshiyuki FuruKawa, Yoshihiro Akashi

*Division of Cardiology, St. Marianna University School of Medicine, Kanagawa, Japan*
The usefulness of three-dimensional anatomical mapping used CARTO SOUND in pediatric patient with premature ventricular contraction originated from tricuspid valve annulus

Shuhei Fujita¹, Kiyoshi Hatasaki¹, Masaki Kinoshita², Motoaki Hirasawa², Kazuo Usuda²

¹Department of Pediatrics, Toyama Prefectural Central Hospital, Toyama, Japan, ²Department of Internal Medicine, Toyama Prefectural Central Hospital, Toyama, Japan
O6-1  A case of simultaneous unipolar radiofrequency ablation for ventricular tachycardia from deep intramural scar in patient with dilated phase of hypertrophic cardiomyopathy

Toshiaki Yano, Shigeto Naito, Eri Goto, Daisuke Kutsuzawa, Yoshiaki Yamaguchi, Satoru Shimizu, Kentaro Minami, Masahiro Nakano, Takehito Sasaki, Kohki Nakamura, Koji Kumagai, Shigeru Oshima
Department of Cardiology, Gunma Prefectural Cardiovascular Center, Gunma, Japan

O6-2  Successful catheter ablation for ventricular tachycardia originating from an intramural origin. A case of Hypertrophic Cardiomyopathy with Mid-Ventricular Obstructive and Apical Aneurysm

Akiko Sanada, Yukio Hosaka, Masaomi Chinushi, Kazuyoshi Takahashi, Asami Kashiwa, Jiro Hiroki, Kazuyuki Ozaki, Keiichi Tsuchida, Yuki Fujihara, Norihito Nakamura, Hirotaka Oda
1Niigata City General Hospital, Niigata, Japan, 2Graduate School of Health Sciences, Niigata University School of Medicine, Niigata, Japan

O6-3  Successful Catheter Ablation of Ventricular Premature Contractions Arising from the Aortomitral Continuity in Structural Heart Disease

Shigetoshi Sakabe, Kazuki Mori, Atsunobu Kasai
The Department of Cardioogy, Ise Red Cross Hospital, Mie, Japan

O6-4  Unforeseen Bundle Branch Reentrant Tachycardia after Right Ventricular In-Flow Ablation

Fumi Yamagami, Yasuhiro Yokoyama, Toru Adachi, Tomoya Yoshino, Yuuki Tsuchiya, Yuuto Kimura, Shinya Sibata, Mai Fujiwara
1Department of Cardiology, Cardiovascular Center, St. Luke’s International Hospital, Tokyo, Japan, 2Department of Clinical Engineering, St. Luke’s International Hospital, Tokyo, Japan

O6-5  Late Potentials, Pacemaps, and Voltage Scanning-guided Catheter Ablation in a Patient with an Electrical Storm

Kenichi Kaseno, Yuichiro Shiomizu, Kaori Hisazaki, Naoki Amaya, Daisuke Aoyama, Kanae Hasegawa, Naoto Tama, Hiroyuki Ikeda, Miki Yokokawa, Yoshitomo Fukuoka, Tetsuji Morishita, Kentaro Ishida, Kenichiro Arakawa, Hiroyasu Uzui, Hiroshi Tada
Department of Cardiovascular Medicine, Faculty of Medical Science, University of Fukui, Fukui, Japan
Let’s Learn More Safer and Effective Sediation for Patients during Catheter Ablation

Chairs Kazuo Matsumoto
Higashimatsuyama Medical Association Hospital, Saitama, Japan / Cardiology Department of International Medical Center Saitama Medical University, Saitama, Japan
Kaoru Okishige
Heart Center, Yokohama-City Bay Red Cross Hospital, Kanagawa, Japan

EL1-1 Method for administration of propofol and dexmedetomidine for catheter ablation—On the basis of pharmacokinetics and pharmacodynamics—
Takayuki Kunisawa
Surgical Operation Department, Asahikawa Medical University Hospital, Hokkaido, Japan

EL1-2 How to Maintain Stable Respiratory Rhythm during Deep Sedation for Catheter Ablation: Tips and Tricks
Takanori Yamaguchi1, Takeshi Tsuchiya1, Akira Fukui2, Kenji Sadamatsu2, Naohiko Takahashi3
1EP Expert Doctors-Team Tsuchiya, Kumamoto, Japan, 2Saga-ken Medical Centre Koseikan, Saga, Japan, 3Department of Cardiology and Clinical Examination, Faculty of Medicine, Oita University, Oita, Japan
Committee Chair
Akihiko Shimizu
Department of Medicine and Health Sciences, Yamaguchi University Graduate School of Medicine, Yamaguchi, Japan

Committee
Naokata Sumitomo
Department of Pediatric Cardiology, Saitama Medical University, International Medical Center, Saitama, Japan
Harumizu Sakurada
Department of Cardiology, Tokyo Metropolitan Health and Medical Treatment Corporation Ohkubo Hospital, Tokyo, Japan
Wataru Shimizu
Department of Cardiovascular Medicine, Graduate School of Medicine, Nippon Medical School, Tokyo, Japan
Mitsuhiko Nishizaki
Department of Cardiology, Yokohama Minami Kyosai Hospital, Kanagawa, Japan
Minoru Horie
Department of Cardiovascular and Respiratory Medicine, Shiga University of Medical Science, Shiga, Japan
Yuji Murakawa
Department of Internal Medicine, Teikyo University Mizonokuchi Hospital, Kanagawa, Japan

AW1-1 Efficacy and Safety of Flecainide for Ventricular Arrhythmias Inpatients with Andersen-Tawil Syndrome with KCNJ2 Mutations
Takeshi Aiba¹, Koji Miyamoto¹,², Hiromi Kimura¹, Hideki Hayashi³, Seiko Ohno¹, Chie Yasuoka⁴, Yoshihito Tanioka⁴, Takeshi Tsuchiya⁵, Yoko Yoshida⁶, Hiroshi Hayashi⁷, Ippei Tsuboi⁷, Kutararo Nakajima⁷, Kohei Ishibashi⁷, Hideo Okamura¹,², Takashi Noda¹, Masaharu Ishihara¹,², Toshihisa Anzai¹,², Satoshi Yasuda¹,², Yoshihiro Miyamoto⁸, Shiro Kamakura¹, Kengo Kusano¹,², Hisao Ogawa¹,², Minoru Horie¹, Wataru Shimizu¹,²,⁷
¹Department of Cardiovascular Medicine, National Cerebral and Cardiovascular Center, Osaka, Japan, ²Department of Advanced Cardiovascular Medicine, Graduate School of Medical Sciences, Kumamoto University, Kumamoto, Japan, ³Department of Cardiovascular and Respiratory Medicine, Shiga University of Medical Science, Shiga, Japan, ⁴Department of Cardiology, Omura Municipal Hospital, Nagasaki, Japan, ⁵EP Expert Doctors-Team Tsuchiya, Kumamoto, Japan, ⁶Department of Pediatric Electrophysiology, Osaka City General Hospital, Osaka, Japan, ⁷Department of Cardiovascular Medicine, Nippon Medical School, Tokyo, Japan, ⁸Department of Preventive Cardiology, National Cerebral and Cardiovascular Center, Osaka, Japan, ⁹Department of Cardiovascular Medicine, Graduate School of Medical Sciences, Kumamoto University, Kumamoto, Japan

AW1-2 Idiopathic Ventricular Arrhythmia Originating From The Cardiac Crux or Inferior Septum: An Epicardial Idiopathic Ventricular Arrhythmia
Mitsuharu Kawamura¹, Edward P. Gerstenfeld¹, Vasanth Vedantham¹, Derek M. Rodrigues¹, J. David Burkhardt², Youichi Kobayashi¹, Henry H. Hsia¹, Gregory M. Marcus¹, Francis E. Marchlinski², Melvin M. Scheinman¹, Nitish Badhwar¹
¹Division of Cardiac Electrophysiology, University of California, USA, ²Overlake Medical Center, USA, ³Texas Cardiac Arrhythmia Institute, USA, ⁴Division of Cardiology, Showa University School of Medicine, Tokyo, Japan, ⁵Cardiovascular Division, University of Pennsylvania, USA
Wednesday, 29 July

Room 6 | 10:30-11:30 Tea-time Lecture [TL1]

Make the right choice for CRT-D: Maximizing value and optimizing outcomes

Chair  Takeshi Mitsuhashi
Cardiovascular Medicine, Saitama Medical Center, Jichi Medical University, Saitama, Japan

Speakers

Takeshi Mitsuhashi
Cardiovascular Medicine, Saitama Medical Center, Jichi Medical University, Saitama, Japan

Fumiharu Miura
Department of Cardiology, Hiroshima City Hospital, Hiroshima, Japan

Makoto Ono
Department of Medicine and Clinical Science, Division of Cardiology, Yamaguchi University Graduate School of Medicine, Yamaguchi, Japan

(Boston Scientific Japan)
Room 6  12:10-13:10 Luncheon Seminar6 [LS6]

Updates on MR Conditional Cardiac Implantable Electronic Devices

Chair  Hiroshi Nakajima  
Japan Research Institute for Device Therapy, Tokyo, Japan

LS6-1 The Review of The Safety of MRI Scans of Patients with MR Conditional Cardiac Devices —How We Can Secure Safety While Maximizing Patients' Access to MRI

Ritsushi Kato  
Department of Cardiology Saitama Medical University, International Medical Center, Saitama, Japan  
(Medtronic Japan Co., Ltd.)
# SVT 1

**Room 6 | 14:30-15:30 Oral Presentation [O7]**

## SVT 1

**Chairs**

- **Fumio Suzuki**  
  *Department of Cardiovascular Medicine, Fukuyuji Hospital, Tokyo, Japan*
- **Motoki Hara**  
  *Department of Cardiology, Higashihiroshima Medical Center, Hiroshima, Japan*

### O7-1 Putative mechanism of a transient prolongation of AH interval during fast-slow atrioventricular nodal reentrant tachycardia

**Yoshiaki Kaneko**, Tadashi Nakajima, Masaki Ota, Takafumi Iijima, Masahiko Kurabayashi  
*Department of Cardiovascular Medicine, Gunma University Hospital, Gunma, Japan*

### O7-2 Efficacy of empiric slow pathway ablation in non-inducible supraventricular tachycardia

*Department of Cardiology, Nagoya University Graduate School of Medicine, Aichi, Japan, Department of Cardiology, Nagoya University Graduate School of Health Science, Aichi, Japan*

### O7-3 Whole His Bundle Mapping Method Using CARTO System is Helpful for Safe AVNRT Ablation

**Tatsuhiko Hirao**, Yasuteru Yamauchi, Osamu Inaba, Shu Yamashita, Masahiro Sekikawa, Junji Yamaguchi, Takamasa Iwai, Hirofumi Arai, Satoshi Shoji, Kandou Kawahatsu, Ryouichi Miyazaki, Tetsuo Yamaguchi, Nobuhiro Hara, Tomoyuki Umemoto, Takamichi Miyamoto, Toru Obayashi, Kenzo Hiroo  
*The Department of Cardiology, Musashino Red Cross Hospital, Tokyo, Japan, Heart Rhythm Center, Tokyo Medical and Dental University, Tokyo, Japan*

### O7-4 Antegrade conduction to the His bundle during right ventricular overdrive pacing distinguishes septal pathway AV reentry from atypical AV nodal reentry tachycardias

**Koichi Nagashima**, Saurabh Kumar, William G. Stevenson, Laurence M. Epstein, Roy M. John, Usha B. Tedrow, Bruce A. Koplan, Gregory F. Michaud  
*Division of Cardiology, Department of Medicine, Nihon University School of Medicine, Tokyo, Japan, Arrhythmia Unit, Cardiovascular Division, Brigham and Women's Hospital, U.S.A.*

### O7-5 The location of recording site of His bundle potential in left atrium

**Akino Yoshimura**, Yasuhsa Iriki, Naoya Oketani, Hitoshi Ichiki, Hideki Okui, Ryuichi Maenosono, Fuminori Namino, Masaaki Miyata, Mitsuru Ohishi  
*Department of Cardiovascular Medicine and Hypertension, Graduate School of Medical and Dental Sciences, Kagoshima University, Kagoshima, Japan*
O8-1 A Novel Double Mutation of hERG Protein in LQT2 Syndrome: Identification and Rescue

Endang Mahati\textsuperscript{1}, Peili Li\textsuperscript{1}, Nani Maharani\textsuperscript{1}, Shinji Sakata\textsuperscript{1}, Junichiro Miake\textsuperscript{2}, Kazuhiro Yamamoto\textsuperscript{2}, Yasuaki Shirayoshi\textsuperscript{1}, Yasutaka Kurata\textsuperscript{1}, Ichiro Hisatome\textsuperscript{1}

\textsuperscript{1}Department of Genetic Medicine and Regenerative Therapeutics, Institute of Regenerative Medicine and Biofunction, Tottori University Graduate School of Medicine, Tottori, Japan, \textsuperscript{2}Department of Molecular Medicine and Therapeutics, Tottori University, Tottori, Japan, \textsuperscript{3}Department of Physiology, Kanazawa Medical University, Ishikawa, Japan

O8-2 Histone deacetylase plays a pivotal role in expression and function of wild-type and mutant hERGs

Peili Li\textsuperscript{1}, Nani Maharani\textsuperscript{1}, Endang Mahati\textsuperscript{1}, Yasuaki Shirayoshi\textsuperscript{1}, Yasutaka Kurata\textsuperscript{2}, Kazuhiro Yamamoto\textsuperscript{3}, Ichiro Hisatome\textsuperscript{1}

\textsuperscript{1}Department of Genetic Medicine and Regenerative Therapeutics, Tottori University Graduate School of Medical Science, Tottori, Japan, \textsuperscript{2}Department of Physiology, Kanazawa Medical University, Ishikawa, Japan, \textsuperscript{3}Department of Cardiovascular Medicine, Tottori University Faculty of Medicine, Tottori, Japan

O8-3 BDNF/ TrkB signaling modulates T-type Ca\textsuperscript{2+} channel expression in cardiomyocytes exposed to hypoxic condition

Masaki Morishima, Takafumi Fujita, Satoshi Osagawa, Katsushige Ono

Department of Pathophysiology, Oita University School of Medicine, Oita, Japan

O8-4 Risk stratification for prevention of Cardiac Sudden Death, Torsardes de Pointes in Long QT syndrome

Mutsuko Sangawa\textsuperscript{1}, Hiroshi Morita\textsuperscript{1}, Motomi Tachibana\textsuperscript{1}, Koji Nakagawa\textsuperscript{1}, Nobuhiro Nishii\textsuperscript{1}, Satoshi Nagase\textsuperscript{1}, Kazufumi Nakamura\textsuperscript{1}, Hiroshi Ito\textsuperscript{1}, Tohru Ohe\textsuperscript{2}

\textsuperscript{1}Department of Cardiovascular Medicine, Okayama University, Okayama, Japan, \textsuperscript{2}Cardiovascular Division of the Sakakibara Heart Institute of Okayama, Okayama, Japan

O8-5 In-vivo recording of larval ECG in zebrafish for the functional characterization of long QT syndrome type 2 mutation

Yoshihiro Tanaka, Kenshi Hayashi, Toyonobu Tsuda, Masakazu Yamagishi

Kanazawa University Graduate School of Medicine, Division of Cardiology, Ishikawa, Japan
Wednesday, 29 July

Room 6  16:30-17:30 Oral Presentation [O9]

Experimental Study 1

Chairs  Haruo Honjo  
Research Institute of Environmental Medicine, Nagoya University, Aichi, Japan
Masatoshi Yamazaki  
Research Institute of Environmental Medicine, Nagoya University, Aichi, Japan

O9-1  Xanthine oxidase inhibitor prevents atrial fibrillation susceptibility by inhibition of oxidative CaMKII in Dahl salt-sensitive rats  
Dong-Zhu Xu, Nobuyuki Murakoshi, Taizou Kimura, Kazuko Tajiri, Akihiko Nogami, Kazutaka Aonuma  
Cardiovascular Division, Faculty of Medicine, University of Tsukuba, Ibaraki, Japan

O9-2  Ranolazine prevents reentry and focal activity in favor of termination of ischemia-related ventricular tachyarrhythmias  
Takashi Ogawa, Haruo Honjo, Masatoshi Yamazaki, Norihiro Ueda, Ryoko Niwa, Kaichiro Kamiya  
The Department of Cardiovascular Research, Research Institute of Environmental Medicine, Nagoya University, Aichi, Japan

O9-3  Linagliptin, a DPP-4 Inhibitor, Suppresses the Electrical Remodeling in Isoproterenol-induced Myocardial Injury Model in Rat  
Naruya Ishizue1, Shinichi Niwano1, Hironori Nakamura1, Tazuru Igarashi1, Tamami Fujiishi1, Tomoharu Yoshizawa1, Jun Oikawa1, Jun Kishihara1, Masami Murakami1, Hidehira Fukaya1, Hiroe Niwano2, Junya Ako1  
1Department of Cardiovascular Medicine, Kitasato University School of Medicine, Kanagawa, Japan, 2Department of Education, Tamagawa University, College of Education, Tokyo, Japan

O9-4  Myofilament Ca$^{2+}$ sensitivity cannot modulate Ca$^{2+}$ wave propagation in intact rat cardiac trabeculae  
Tetsuya Handoh, Masahito Miura, Yuhto Taguchi, Chiyohiko Shindoh  
Department of Clinical Physiology, Tohoku University of Graduate School of Medicine, Miyagi, Japan

O9-5  Regional ROS production mediates arrhythmia susceptibility in rat myocardium with nonuniform contraction  
Yuhto Taguchi, Masahito Miura, Tetsuya Handoh, Chiyohiko Shindoh  
Department of Clinical Physiology, Tohoku University of Graduate School of Medicine, Miyagi, Japan
What Physicians with Arrhythmias as Their Specialties should Know about Ion Channels?

Chair  Haruaki Nakaya  
   *Chiba University, Chiba, Japan*

EL2  What Physicians with Arrhythmias as Their Specialties should Know about Ion Channels?  

Tetsushi Furukawa  
   *Department of Bio-informational Pharmacology, Medical Research Institute, Tokyo Medical and Dental University, Tokyo, Japan*
Room 7  10:00-11:00 Educational Lecture3 [EL3]

Sleep, Death and the Heart ★

Chair  Eiichi Watanabe
Department of Cardiology, Fujita Health University, Aichi, Japan

EL3  Sleep, Death and the Heart

Virend K. Somers
Mayo Clinic, USA
Atrial Selective Sodium and Potassium Channel Blockers for the Management of Atrial Fibrillation ★

Chair: Kengo Kusano
Cardiovascular Medicine, National Cerebral and Cardiovascular Center, Osaka, Japan

EL4 Atrial Selective Sodium and Potassium Channel Blockers for the Management of Atrial Fibrillation
Charles Antzelevitch
Lankenau Institute of Medical Research / SUNY Upstate Medical University, USA
Wednesday, 29 July

Room 7  12:10-13:10 Luncheon Seminar7 [LS7]

Improving Catheter Ablation Outcomes with New and Innovative Technologies ★

Chair  Kenzo Hirao
Tokyo Medical and Dental University, Heart Rhythm Center, Tokyo, Japan

LS7-1 Improving Catheter Ablation Outcomes with New and Innovative Technologies
Andrea Natale
Texas Cardiac Arrhythmia Institute, USA

(St. Jude Medical Japan Co., Ltd.)
Room 7  14:30-15:30 Special Lecture [SL]

★
Chair  Masayasu Hiraoka
Toride Kitasoma Medical Center Hospital, Ibaraki, Japan

SL1 Left Cardiac Sympathetic Denervation in the Prevention of Sudden Death in LQTS and CPVT. Rationale and Clinical Experience
Peter J. Schwartz
IRCCS Istituto Auxologico Italiano, Italy

SL2 Current topics of catecolaminergic polymorphic ventricular tachycardia
Naokata Sumitomo
Department of Pediatric Cardiology, Saitama Medical University, International Medical Center, Saitama, Japan
Effect of Surgical Therapy for Atrial Fibrillation—The Maintenance of Sinus Rhythm and Prevention of Thromboembolic Events—

Chairs  
Takashi Nitta  
Department of Cardiovascular Surgery, Nippon Medical School, Tokyo, Japan

Masataka Mitsuno  
Departments of Cardiovascular Surgery, Hyogo College of Medicine, Hyogo, Japan

SP5-1  
Key Note Lecture:
Fumitaka Isobe  
Department of Cardiac Surgery, Aichi Medical University, Aichi, Japan / Senri-Chuo Hospital, Osaka, Japan

SP5-2  
Prevention of stroke during 2 decades after AF surgery
Yosuke Ishii, Shun-ichiro Sakamoto, Yasuhiro Kawase, Atsushi Hiromoto, Yasuo Miyagi, Hiroya Ohmori, Takashi Sasaki, Makoto Shirakawa, Motoko Tanoue, Tadashi Shibata, Junya Aoyama, Takashi Nitta  
Cardiovascular Surgery, Nippon Medical School, Tokyo, Japan

SP5-3  
Late recurrence of atrial fibrillation and stroke rates after Maze procedure
Ken Yamanaka, Tatsuhiko Komiya, Hiroshi Tsuneyoshi, Takeshi Shimamoto  
Cardiovascular Surgery, Kurashiki Central Hospital, Okayama, Japan

SP5-4  
Postoperative stroke after Cox-maze procedure for treatment of atrial fibrillation
Masahiro Tanji, Kouki Takahashi  
Department of Cardiovascular Surgery, Ohta Nishinouchi Hospital, Fukushima, Japan

SP5-5  
Thoracoscopic Left-atrial Appendectomy in Non-valvular Atrial Fibrillation: Its Safety, Prevention and Deanticoagulation Effects
Toshiya Ohtsuka¹, Mikio Ninomiya¹, Takahiro Nonaka¹, Motoyuki Hisagi¹, Takahiro Ohta²  
¹Department of Cardiovascular Surgery, Tokyo Metropolitan Tama Medical Center, Tokyo, Japan, ²Department of Neurosurgery, Tokyo Metropolitan Tama Medical Center
Effects of Aging and Hypertension on Antithrombotic Function of Atrial Endocardium in Atrial Tachy-paced Rat Model

Yu-ki Iwasaki¹,², Takeshi Yamashita², Akiko Sekiguchi², Wataru Shimizu³

¹The Department of Cardiovascular Medicine, Nippon Medical School, Tokyo, Japan, ²The Cardiovascular Institute, Tokyo, Japan
Room 7  17:00-18:00 Educational Lecture5 [EL5]

Diagnosis and Treatment of Syncope ★

Chair  Koichi Mizumaki
Clinical Research and Ethics Center, University of Toyama, Toyama, Japan

EL5  Diagnosis and Treatment of Syncope

David G. Benditt
University of Minnesota Medical School, USA
Sudden Cardiac Death 1

**Chairs**
Yoshihisa Abe  
*Department of Cardiology, Research Institute for Brain and Blood Vessels Akita, Akita, Japan*

Mari Amino  
*Department of Cardiovascular Medicine, Tokai University School of Medicine, Kanagawa, Japan*

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**O10-1** Outcomes of Patients with Vasospastic Angina Surviving Out-of-Hospital Cardiopulmonary Arrest
Asami Kashiwa, Yukio Hosaka, Kazuyoshi Takahashi, Jiro Hiroki, Norihito Nakamura, Yuki Fujihara, Akiko Sanada, Kazuyuki Ozaki, Keiichi Tsuchida, Hirotaka Oda  
*Department of Cardiology, Niigata City General Hospital, Niigata, Japan*

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**O10-2** Prognostic Impact of Ventricular Late Potential for the Arrhythmic Events in Patients with Implantable Cardioverter-Defibrillator for Primary Prevention of Sudden Cardiac Death
Kosuke Aoki, Akira Shimane, Katsunori Okajima, Kunihiko Kiuchi, Kiminobu Yokoi, Jin Teranishi  
*Department of Cardiology, Himeji Cardiovascular Center, Hyogo, Japan*

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**O10-3** Long-term Survival and Incidences of Non-fatal Ventricular Tachycardia and Sudden Cardiac Death after Alcohol Septal Ablation for Hypertrophic Obstructive Cardiomyopathy in Japan
Hirosige Murata¹, Yasushi Miyauchi², Morimasa Takayama³, Meiso Hayashi², Yu-ki Iwasaki², Kenji Yodogawa², Munenori Kosugi¹, Eitaro Kodani², Akihiro Nakagomi², Mitsunobu Kitamura², Hitoshi Takano², Osamu Igawa¹, Yoshi Kusama¹, Hirotugu Atarashi², Wataru Shimizu²  
¹Department of Internal Medicine and Cardiology, Tama-Nagayama Hospital, Nippon Medical School, Tokyo, Japan, ²Department of Cardiovascular Medicine, Nippon Medical School, Tokyo, Japan, ³Division of Cardiology, Department of Internal Medicine, Sakakibara Memorial Hospital, Tokyo, Japan

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**O10-4** Cardiac I-123 Metaiodobenzylguanidine Imaging as a Predictor of Cardiac Death in Patients with Implantable Cardioverter Defibrillator who had Previous Appropriate ICD Therapy
Masato Kawasaki, Takahisa Yamada, Yoshio Furukawa, Tsutomu Kawai, Satoshi Takahashi, Masatake Fukunami  
*Division of Cardiology, Osaka General Medical Center, Osaka, Japan*
Incidence of appropriate and inappropriate shocks in different category of patients with implantable cardioverter defibrillators (ICD)

Kazuo Sakamoto, Yasushi Mukai, Shujiro Inoue, Susumu Takase, Shunsuke Kawai, Tomomi Nagayama, Akiko Chishaki, Kenji Sunagawa

Cardiovascular Medicine, Kyushu University, Fukuoka, Japan
Sudden Cardiac Death 2

**O11-1** Primary experience of the wearable cardioverter-defibrillator use for patients at high risk for sudden cardiac death

Shingo Sasaki, Takahiko Kinjo, Yuji Ishida, Taihei Itoh, Kenichi Sasaki, Daisuke Horiuchi, Masaomi Kimura, Ken Okumura

Department of Advance Management of Cardiac Arrhythmias, Hirosaki University School of Medicine, Aomori, Japan

**O11-2** Wearable cardioverter defibrillator as a temporary protection for sudden arrhythmic death - A single center European experience -

Yusuke Kondo, Takashi Kurita, Marehiko Ueda, Yoshio Kobayashi, Markus Linhart, Rene P. Andrie, Joerg O. Schwab

Department of Medicine-Cardiology, University of Bonn, Bonn, Germany
Division of Cardiovascular Center, Department of Medicine, Kinki University, Osaka, Japan
Department of Cardiology, Chiba University Graduate School of Medicine, Chiba, Japan

**O11-3** Usefulness of the wearable cardioverter-defibrillator in safe management of patients at high risk for sudden cardiac death in general ward

Yoshihiro Shoji, Shingo Sasaki, Takahiko Kinjo, Taihei Itoh, Kenichi Sasaki, Daisuke Horiuchi, Masaomi Kimura, Ken Okumura

Department of Cardiology, Hirosaki University School of Medicine, Aomori, Japan
Department of Advance Management of Cardiac Arrhythmias, Hirosaki University School of Medicine, Aomori, Japan

**O11-4** Clinical and electrocardiographic variables and delivery of ICD-shocks in patients with vasospastic angina resuscitated from cardiac arrest

Ami Isshiki, Hiroyuki Ito, Hirotaka Takatori, Yoshihiro Nakamura, Yoshiro Inoue, Osamu Sasaki, Nobuo Yoshimoto

Department of Cardiology, Saitama Medical Center, Saitama Medical University, Saitama, Japan

**O11-5** Analysis of survival in HCM patients based on classification by the HCM Risk-SCD formula in the 2014 ESC guideline on HCM

Mayuko Yagawa, Kanki Inoue, Kohei Tanizaki, Jun Umemura, Hitonobu Tomoike

Sakakibara Heart Institute, Tokyo, Japan
Wednesday, 29 July

Room 8 | 11:00-12:00 Debate1 [D1]

Is an ELR Useful in Case of Syncope?

Chair: Bonpei Takase
Department of Intensive Care Medicine, National Defense Medical College, Saitama, Japan

D1-1 Pro

Kaoru Tanno
Department of Cardiology, Showa University Koto Toyosu Hospital, Tokyo, Japan

D1-2 Con

Ritsuko Kohno
Department of Heart Rhythm Management, University of Occupational and Environmental Health, Fukuoka, Japan
Room 8  12:10-13:10 Luncheon Seminar8 [LS8]

How to manage HF patients by device therapies — CRTD and LVAD

Chair  Kazuo Matsumoto
Higashimatsuyama Medical Association Hospital, Saitama, Japan / Cardiology Department of International Medical Center Saitama Medical University, Saitama, Japan

LS8-1  How to manage HF patients by device therapies — CRTD and LVAD

Toshiko Nakai
Nihon University Itabashi Hospital, Tokyo, Japan

Taiki Higo
Kyushu University Hospital, Fukuoka, Japan

(THORATEC CORPORATION / NIPRO CORPORATION)
Room 8  14:30-15:30 Debate2 [D2]

Is Dose Adjustment of Anticoagulant Necessary for Japanese Patients?

Chair    Hiroshi Inoue  
Saiseikai Toyama Hospital, Toyama, Japan

D2-1 Pro

Yuji Okuyama  
Advanced Cardiovascular Therapeutics, University of Osaka, Osaka, Japan

D2-2 Con

Takeshi Yamashita  
The Cardiovascular Institute, Tokyo, Japan
How to Perform PV Isolation—Dragging or Point by Point—

Chair
Seiji Takatsuki
Department of Cardiology, Keio University School of Medicine, Tokyo, Japan

D3-1 Point by Point
Seiichiro Matsuo
The Department of Cardiology, The Jikei University School of Medicine, Tokyo, Japan

D3-2 Dragging
Masaomi Kimura
Hirosaki University Graduate School of Medicine, Department of Cardiology, Aomori, Japan
Room 8  16:30-17:30 Debate4 [D4]

Is Genetic Testing Necessary for the Patients with Brugada Syndrome?

Chair  Wataru Shimizu  
Department of Cardiovascular Medicine, Graduate School of Medicine, Nippon Medical School, Tokyo, Japan

D4-1  Pro
Yoshino Minoura  
Division of Cardiology, Department of Medicine, Showa University School of Medicine, Tokyo, Japan

D4-2  Con
Takeshi Aiba  
Department of Cardiovascular Medicine, National Cerebral and Cardiovascular Center, Osaka, Japan
不整脈患者のリハビリテーション

座長
牧田 茂
埼玉医科大学国際医療センター心臓リハビリテーション科

MPS1-1 不整脈合併心不全患者の心臓リハビリテーション
折口秀樹
JCHO九州病院内科

MPS1-2 心房細動と心臓リハビリテーション〜症例報告を踏まえた考察〜
白石裕一, 濱岡哲郎, 今井幹昌, 畢柳彰, 白山武司
京都府立医科大学循環器内科

MPS1-3 デバイス植込み患者に対するCPXの安全性と有用性
熊坂礼音, 稲田道成, 藤原玲子, 中尾一泰, 荒川鉄雄, 中西道郎, 大原貴裕, 築瀬正伸, 野口輝夫, 後藤英一
国立循環器病研究センター心臓血管内科

MPS1-4 LVAD患者の不整脈への対応
肥後太基
九州大学医学部循環器内科
Room 9  10:30-12:00 Medical Professional Session2 [MPS2]

デバイス治療におけるチーム医療

座長  安藤献児
       小倉記念病院循環器科
       前田明子
       杏林大学医学部付属病院循環器内科不整脈センター

MPS2-1 心臓植込みデバイス遠隔モニタリングのためのチーム医療構築の現状と障壁
佐藤俊明
       杏林大学医学部第二内科循環器内科

MPS2-2 ホームモニタリングを活用した病院連携における心臓デバイスチームの役割
貝谷和昭
       天理よろず相談所病院循環器内科

MPS2-3 看護師の立場から見た、デバイス挿入患者へのチーム医療の取り組み
吉富可那子
       社会保険小倉記念病院循環器科

MPS2-4 当院における心臓植え込み型デバイス患者の安全についての現状と課題
森野晴大、清水芳行、阿知和訓貴、植本将史、加藤ゆり、村上善正
       名古屋市立東部医療センター

MPS2-5 心室ペーシング率低値は、植込み型除細動器装着症例における不適切ショック作動の危険因子となりうるか？
小野 仁1、近藤祐介2、上田希彦3、橋口直貴3、梶山貴嗣3、石村昌行3、宮澤一雄3、藤江 舞1、小林美知彦1、小林欣夫3
1千葉大学医学部附属病院ME機器管理センター，2Department of Medicine-Cardiology, University of Bonn, Germany，3千葉大学大学院医学研究院循環器内科学
Atrial Fibrillation and Anticoagulation

Chair: Yukihiro Koretsune
Institute for Clinical Research, Osaka National Hospital, Osaka, Japan

LS9-1 Current and Future Strategies for Atrial Fibrillation

Ken Okumura
Department of Cardiology, Hirosaki University Graduate School of Medicine, Aomori, Japan

(Nippon Boehringer Ingelheim Co., Ltd.)
The mechanism and prevention of the transition from paroxysmal to chronic atrial fibrillation: Basic, genetic and clinical approaches

**Chair**  
Makoto Arita  
*Oita University, Oita, Japan*

**EF1**  
Atrial Fibrillation and Atrial Remodeling  
Katsushige Ono  
*Department of Pathophysiology, Oita University School of Medicine, Oita, Japan*

**EF2**  
Role of Trigger and Substrate in the Mechanism of Atrial Fibrillation Persistence  
Koichi Inoue  
*Cardiovascular Center, Sakurabashi Watanabe Hospital, Osaka, Japan*

**EF3**  
Mechanisms and Prevention of Development into Chronic Atrial Fibrillation: Implication from Surface ECG Analysis  
Yasushi Miyauchi  
*Department of Cardiovascular Medicine, Nippon Medical School, Tokyo, Japan*

**EF4**  
The lessons learned from recent genomic studies on the pathogenesis of atrial fibrillation  
Tetsushi Furukawa  
*Department of Bio-informational Pharmacology, Medical Research Institute, Tokyo Medical and Dental University, Tokyo, Japan*
**Problem of the anticoagulant therapy**

**Chair**  
Eiichi Watanabe  
*Department of Cardiology, Fujita Health University, Aichi, Japan*

**ES1-1**  
Reconsideration of anticoagulant therapy in patients with chronic kidney disease  
~Attention to warfarin and novel oral anticoagulants~  
Masanori Abe  
*Division of Nephrology, Hypertension and Endocrinology, Department of Internal Medicine, Nihon University School of Medicine, Tokyo, Japan*

**ES1-2**  
The paradigm shift in gastrointestinal endoscopy brought by the revised guideline  
Satoshi Ono  
*Department of Gastroenterology, Graduate School of Medicine, The University of Tokyo, Tokyo, Japan*

(Eisai Co Ltd.)
Room 10  9:00-10:00 Oral Presentation [O12]

Anticoagulant 1

Chairs  Akiko Chishaki  
Faculty of Medical Sciences, Department of Health Sciences, Kyushu University, Fukuoka, Japan

Kaori Shinagawa  
Pharmaceuticals and Medical Devices Agency, Tokyo, Japan

O12-1 Significance of prothrombin time measurement using specific regent in patients with atrial fibrillation at outpatient clinic

Naoki Nozaki\textsuperscript{1}, Hidenari Hozawa\textsuperscript{1}, Masahiko Takahashi\textsuperscript{1}, Imun Tei\textsuperscript{2}
\textsuperscript{1}Cardiovascular Medicine, Ayase Heart Hospital, Tokyo, Japan, \textsuperscript{2}Cardiovascular Surgery, Ayase Heart Hospital, Tokyo, Japan

O12-2 Clinical Characteristics and Outcomes of Cardiac Tamponade in Patients with Taking Non-vitamin K Antagonist Oral Anticoagulants

Hirosuke Yamaji\textsuperscript{1}, Shunichi Higashiya\textsuperscript{1}, Hiroshi Kawamura\textsuperscript{2}, Takashi Murakami\textsuperscript{2}, Kazuyoshi Hina\textsuperscript{2}
\textsuperscript{1}Heart Rhythm Center, Okayama Heart Clinic, Okayama, Japan, \textsuperscript{2}Cardiovascular Medicine, Okayama Heart Clinic, Okayama, Japan

O12-3 Electrical cardioversion of atrial fibrillation with the novel oral anticoagulants in the real world clinical practice : Single center study

Naoki Shibata, Itsuro Morishima, Hideyuki Tsuboi, Michitaka Uesugi, Yasuhiro Morita, Ruka Yoshida, Tappei Furuta, Toshio Tomomatsu, Kazushi Terada, Yoshihiro Ikai, Kazuhiro Tsuzuki, Takanito Sone
Department of Cardiology, Ogaki Municipal Hospital, Gifu, Japan

O12-4 Effect of non-vitamin K antagonist oral anticoagulant on left atrial thrombi in patients with atrial fibrillation and cardiogenic stroke

Hideyuki Kishima, Takanao Mine, Kenki Ashida, Tohru Masuyama
The Department of Internal Medicine, Cardiovascular Division, Hyogo College of Medicine, Hyogo, Japan

O12-5 Prediction of bleeding events in atrial fibrillation treated with non-vitamin K antagonist oral anticoagulants

Toyonobu Tsuda, Kenshi Hayashi, Tetsuo Konno, Kenji Sakata, Hiroshi Furusho, Masayuki Takamura, Masaaki Kawashiri, Masakazu Yamagishi
Division of Cardiovascular Medicine, Kanazawa University Graduate School of Medical Science, Ishikawa, Japan
AF Ablation Complication 1

**Chairs**
Yeonghwa Chun  
*Arrhythmia Center, Takeda Hospital, Kyoto, Japan*

Yoshihisa Enjoji  
*Department of Cardiology, Tokyo Heart Center, Tokyo, Japan*

**O13-1**  Esophageal Temperature Monitoring during Cryoballoon Ablation in the Left Atrium using a Deflectable Probe and Fixed Sensor Probe  
Atsushi Kobori, Yasuhiro Sasaki, Kitae Kim, Takafumi Yamane, Natsuhiko Ehara, Makoto Kinoshita, Shuichiro Kaji, Yutaka Furukawa  
*Division of Cardiology, Kobe City Medical Center General Hospital, Hyogo, Japan*

**O13-2**  Efficacy and safety of minimized left atrial posterior wall ablation strategy to prevent esophageal-gastric complications in patients with atrial fibrillation  
Katsunori Okajima, Akira Shimane, Kunihiko Kiuchi, Kiminobu Yokoi, Jin Teranishi, Kosuke Aoki, Misato Chimura, Hideo Tsubata, Taishi Miyata, Yuki Matsuoka, Takayoshi Toba, Shogo Ohishi, Takahiro Sawada, Yasue Tsukishiro, Tetsuaki Ohnishi, Seiichi Kobayashi, Shinichiro Yamada, Yasuyo Taniguchi, Yoshinori Yasaka, Hiroya Kawai  
*Department of Cardiology, Himeji Cardiovascular Center, Hyogo, Japan*

**O13-3**  Can Sheath Infusion during Atrial Fibrillation Ablation Prevent New Silent Cerebral Lesions?  
Norikazu Watanabe, Yuya Nakamura, Kouichiro Inoguchi, Akinori Ochi, Yuta Chiba, Yumi Munetsugu, Tatsuya Onuki, Yoshino Minoura, Taro Adachi, Mitsuharu Kawamura, Taku Asano, Youichi Kobayashi  
*Division of Cardiology, Department of Medicine, Showa University School of Medicine, Tokyo, Japan*

**O13-4**  Esophageal injury related to cryoablation in patients with paroxysmal atrial fibrillation  
Yasuaki Tsumagari, Yukio Sekiguchi, Yasutoshi Shinoda, Kojiro Ogawa, Eiko Sai, Yoshiaki Yui, Keita Masuda, Takeshi Machino, Kenji Kuroki, Miyako Igarashi, Akihiko Nogami, Kazutaka Aonuma  
*Cardiovascular Division, Faculty of Medicine, University of Tsukuba, Ibaraki, Japan*
The feasibility of the esophageal-temperature cutoff value of 38 degrees during atrial fibrillation ablation

Takehiro Kimura, Kazuaki Nakajima, Shin Kashimura, Akira Kunitomi, Takahiko Nishiyama, Yoshinori Katsumata, Nobuhiro Nishiyama, Kotaro Fukumoto, Yoko Tanimoto, Yoshiasu Aizawa, Keiichi Fukuda, Seiji Takatsuki

Department of Cardiology, Keio University School of Medicine, Tokyo, Japan
Room 10  11:00-12:00 Oral Presentation [O14]

AF Ablation 4

Chairs  Kaoru Okishige  
Heart Center, Yokohama-City Bay Red Cross Hospital, Kanagawa, Japan
Yuji Okuyama  
Advanced Cardiovascular Therapeutics, Osaka University, Osaka, Japan

O14-1 The efficacy of very low energy output radiofrequency ablation in pulmonary vein isolation

Takatoshi Shigeta¹, Hiroyuki Okada¹, Masahiro Hada¹, Masao Yamaguchi¹, Tatsuya Fujinami¹, Go Ishimaru¹, Hiroshi Inagaki¹, Nobuo Toshida¹, Toshihiko Takamoto¹, Kenzo Hirao²
¹Cardiovascular Medicine, Soka Municipal Hospital, Saitama, Japan, ²Heart Rhythm Center, Tokyo Medical and Dental University, Tokyo, Japan

O14-2 How to identify electrical breakthrough sites occurring in the left pulmonary veins during atrial fibrillation ablation

Shinya Sugiura, Koji Matsuoka  
Department of Cardiology, Matsusaka Chuo Hospital, Mie, Japan

O14-3 A Limited Number of Muscular Bundles Extend into Pulmonary Veins

Kenta Kajihara, Motoki Hara, Hikari Jo, Shinji Kajiwara, Kazuhiro Nitta, Akihiko Morisue, Yujiro Ono  
The Department of Cardiology, Higashihiroshima Medical Center, Hiroshima, Japan

O14-4 Pace and ablate procedure to obtain unexcitability on the ablation line for pulmonary vein isolation; Its impact on initial clinical outcome of atrial fibrillation ablation

Koichi Inoue, Nobuaki Tanaka, Koji Tanaka, Yuko Toyoshima, Takafumi Oka, Yoshiyuki Orihara, Yasushi Koyama, Atsunori Okamura, Katsuomi Iwakura, Kenshi Fujii  
Sakurabashi Watanabe Hospital, Cardiovascular Center, Osaka, Japan

O14-5 Loss of pace capture on the ablation line can improve the durability of pulmonary vein isolation for atrial fibrillation

Koichi Inoue, Nobuaki Tanaka, Koji Tanaka, Yuko Toyoshima, Takafumi Oka, Yoshiyuki Orihara, Yasushi Koyama, Atsunori Okamura, Katsuomi Iwakura, Kenshi Fujii  
Sakurabashi Watanabe Hospital, Cardiovascular Center, Osaka, Japan
Direct Anatomic Visualization with a Novel Ablation Balloon for PV Isolation ★

Chair: Kazutaka Aonuma
Cardiovascular Division, Graduate School of Comprehensive Human Sciences, University of Tsukuba, Ibaraki, Japan

Boris Schmidt
Cardiovascular Center Bethanien, Germany

Commentator
Shih-Ann Chen
National Yang Ming University, Taiwan

(Japan Lifeline Co., Ltd.)
AF Ablation 5

Chairs

Koji Kumagai
Division of Cardiology, Gunma Prefectural Cardiovascular Center, Gunma, Japan

Yu-ki Iwasaki
Department of Cardiovascular Medicine, Nippon Medical School, Tokyo, Japan

O15-1 Left Atrial Appendage Closure with Intracardiac Echo Guidance

Yae Matsuo1, Petr Neuzil2, Yoshiaki Kaneko1, Masahiko Kurabayashi1
1Department of Cardiology, Gunma University Hospital, Gunma, Japan, 2Department of Cardiology, Homolka Hospital, Prague, Czech Republic

O15-2 A new endoscopy-surgical technique for super-extensive epicardial left pulmonary vein isolation

Toshiya Ohtsuka
International AFIB Center of Excellence Tokyo and Department of Cardiac Surgery, Tokyo Metropolitan Tama Medical Center, Tokyo, Japan

O15-3 Intra-atrial Conduction Block after Multiple Ablation Procedures for Atrial Tachycardias in Patient Undergoing Mitral Valve Plasty

Akira Kimata1, Kentaro Yoshida1, Yoko Ito1, Masako Misaki1, Masako Baba1, Daigo Hiraya1, Naoya Koda1, Kazutaka Aonuma1, Noriyuki Takeyasu1
1Division of Cardiovascular Medicine, Ibaraki Prefectural Central Hospital, Ibaraki, Japan, 2Cardiovascular Division, Faculty of Medicine, University of Tsukuba, Ibaraki, Japan

O15-4 Mitral isthmus ablation using a circular mapping catheter positioned in the left atrial appendage as a reference for conduction block

Takahiko Nishiyama, Kazuaki Nakajima, Akira Kunitomi, Shin Kashimura, Yoshinori Katsumata, Takehiro Kimura, Nobuhiro Nishiyama, Kotaro Fukumoto, Yoko Tanimoto, Yoshiyasu Aizawa, Keiichi Fukuda, Seiji Takatsuki
Department of Cardiology, Keio University School of Medicine, Tokyo, Japan

O15-5 The Impact of Epicardial adipose tissue volume on left atrial electroanatomical remodeling in patients with atrial fibrillation

Kennosuke Yamashita, Masahiko Ochiai, Wataru Igawa, Morio Ono, Takehiko Kido, Seitarou Ebara, Toshitaka Okabe, Myong-Hwa Yamamoto, Shigeo Saito, Koichi Hoshimoto, Kisaki Amemiya, Tadayuki Yakushiji, Naoei Isomura, Hiroshi Araki
Showa University Northern Yokohama Hospital, Kanagawa, Japan
Room 10 15:30-16:30 Oral Presentation [O16]

Anticoagulant 2

Chairs Shiro Iwanaga
Department of Cardiology, Saitama Medical University, International Medical Center, Saitama, Japan
Hiroko Nawata
Department of Internal Medicine, Edogawa Hospital, Tokyo, Japan

O16-1 Inappropriate Dose Prescription of Non-Vitamin K Dependent Anticoagulants for the Patients with Atrial Fibrillation

Hidehira Fukaya¹, Shinichi Niwano², Hironori Nakamura³, Naruya Ishizue⁴, Tazuru Igarashi⁵, Tamami Fujiishi⁶, Tomoharu Yoshizawa⁷, Jun Oikawa⁸, Akira Satoh⁹, Jun Kishihara¹, Masami Murakami¹, Junya Ako¹
¹Department of Cardiovascular Medicine, Kitasato University School of Medicine, Kanagawa, Japan, ²Department of Cardiovascular Medicine, Yamato Municipal Hospital, Kanagawa, Japan

O16-2 Safety of Apixaban for Stroke Prevention in Japanese Patients with Nonvalvular Atrial Fibrillation from Post Marketing Surveillance: STANDARD study

Hiroshi Inoue¹, Masahiro Yasaka², Keiko Maruyama³, Hiroyuki Hashimoto⁴, Takako Yamada¹, Keita Seino⁵, Hiroshi Tamada¹
¹University of Toyama, Toyama, Japan, ²Department of Cerebrovascular Medicine and Neurology, National Hospital Organization, Kyushu Medical Center, Fukuoka, Japan, ³Bristol-Myers K.K., Tokyo, Japan, ⁴Pfizer Japan Inc, Tokyo, Japan

O16-3 Should we attend to seasonal variation?: Season-dependent difference was NOT observed in partial thromboplastin time under dabigatran therapy

Shinya Suzuki, Takayuki Otsuka, Takuto Arita, Naoharu Yagi, Koichi Sagara, Takeshi Yamashita
Department of Cardiovascular Medicine, The Cardiovascular Institute, Tokyo, Japan

O16-4 Patient characteristics of NOACs user in the real clinical scene

Ken Umetani, Keita Sano, Aritaka Makino, Masahiko Nakamura
Department of Cardiology, Yamanashi Prefectural Central Hospital, Yamanashi, Japan

O16-5 Dissolution of the left atrial appendage thrombus with rivaroxaban anticoagulant therapy in patient with hypercoagulability

Yuya Nakamura, Yoshino Minoura, Kou Ogawa, Akinori Ochi, Kouichiro Inokuchi, Yuta Chiba, Shiro Kawasaki, Yoshimi Onishi, Yumi Munetsugu, Miwa Kikuchi, Tatsuya Onuki, Norikazu Watanabe, Taro Adachi, Mitsuharu Kawamura, Taku Asano, Youichi Kobayashi
Division of Cardiology, Department of Medicine, Showa University School of Medicine, Tokyo, Japan
AF Ablation Complication 2

**Chairs**

Kazumi Kimura  
*Department of Neurological Science, Graduate School of Medicine, Nippon Medical School, Tokyo, Japan*

Mitsuhiro Nishizaki  
*Department of Cardiology, Yokohama Minami Kyosai Hospital, Kanagawa, Japan*

**O17-1**  
Clinical value of left atrial emptying fraction for predicting of left atrial thrombus in patients before atrial fibrillation ablation  
Naoaki Hashimoto, Takanori Arimoto, Tadateru Iwayama, Daisuke Ishigaki, Yu Kumagai, Tetsu Watanabe, Isao Kubota  
*Yamagata University School of Medicine, Department of Cardiology, Pulmonology, and Nephrology, Yamagata, Japan*

**O17-2**  
The Incidence of Silent Cerebral Thromboembolism in the Second Procedure of Catheter Ablation for Atrial Fibrillation  
Akemi Aso, Toshihiro Nakamura, Kyohei Meno, Yujiro Ura, Masahiro Araki, Emiko Ejima, Masaaki Nishihara, Takahiro Mori, Katsuhiko Takenaka, Koutaro Numaguchi, Yoshinobu Murasato, Koji Hiyamuta  
*The Department of Cardiology, National Hospital Organization Kyushu Medical Center, Fukuoka, Japan*

**O17-3**  
Increase in Esophageal Temperature during Radiofrequency Delivery and Spontaneous Conduction Block between the Posterior Left Atrium and Left Pulmonary Veins  
Naoyuki Miwa, Yoshihide Takahashi, Mayumi Masumura, Shinsuke Iwai, Tasuku Yamamoto, Junichi Doi, Atsushi Sakakibara, Yoshinori Yoshida, Tesuo Ohmi, Masakazu Ohno, Toshikazu Nozato, Yasuhiro Sato, Kenzo Hirao, Mitsuaki Isobe  
\(^1\)National Disaster Medical Center, Tokyo, Japan, \(^2\)Heart Rhythm Center, Tokyo Medical and Dental University, Tokyo, Japan, \(^3\)Department of Cardiovascular Medicine, Tokyo Medical and Dental University, Tokyo, Japan, \(^4\)Japanese Red Cross Musashino Hospital, Tokyo, Japan

**O17-4**  
The Impact of Ablation Process and Strategy in Left Atrium on Microemboli Formation during Irrigated RF Catheter Ablation in an in vivo Model  
Mitsuru Takami, H. Immo Lehmann, Kay D. Parker, Susan B. Johnson, Douglas L. Packer  
*Cardiovascular Division, Mayo Clinic, Rochester, USA*

**O17-5**  
Plasma von Willebrand Factor Activity as a Novel Predictor of Recurrence after Catheter Ablation for Atrial Fibrillation  
Mitsuru Wada, Yuki Wada, Ikutaro Nakajima, Kohei Ishibashi, Koji Miyamoto, Hideo Okamura, Takashi Noda, Takeshi Aiba, Shiro Kamakura, Kengo Kusano  
*National Cerebral and Cardiovascular Center, Osaka, Japan*
O18-1  The Investigation of Clinical Data and Cardiac Events on Positive Late Potentials in Myocardial Infarction Patients

Natsuko Hosoya, Ryosuke Takeuchi, Hirotugu Mitake, Marina Ishida, Tamotsu Takagi, Gaku Matsukura, Keita Kodama, Shigetaka Kageyama, Yuzu Watanabe, Hirofumi Sugiyama, Koichiro Murata, Ryuzo Nawada, Tomoya Onodera

The Department of Cardiology, Shizuoka City Shizuoka Hospital, Shizuoka, Japan

O18-2  Predictive value of filtered QRS for sudden cardiac death in Heart Failure Patients with Implantable Cardioverter Defibrillator

Atsushi Suzuki, Tsuyoshi Shiga, Ryuta Henmi, Ken Kato, Daigo Yagishita, Koichiro Ejima, Tetsuyuki Manaka, Morio Shoda, Nobuhisa Hagiwara

Department of Cardiology, Tokyo Women's Medical University, Tokyo, Japan

O18-3  A head–to–head comparison of microvolt T–wave alternans and T–wave amplitude variability

Tomohide Ichikawa, Eiichi Watanabe, Masayuki Koshibawa, Mayumi Yamamoto, Kentarou Okuda, Yoshihiro Sobue, Masahide Harada, Yukio Ozaki

The Department of Cardiology, Fujita Health University, Aichi, Japan

O18-4  Disopyramide Significantly Decreases T-Wave Alternans without Influence on Heart Rate Turbulence Indices in Patients with Ventricular Premature Contraction

Bonpei Takase¹, Yuko Higashimura¹, Akira Hamabe²

¹Department of Intensive Care Medicine, National Defense Medical College, Saitama, Japan, ²Self Defense Forces Central Hospital, Internal Medicine, Tokyo, Japan

O18-5  Comparison of the Ambulatory ECG-based T-wave Alternans and the Exercise Microvolt-TWA Under Simultaneous Recording

Toshio Kinoshita, Shunji Fukunaga, Hideki Koike, Masaya Shinohara, Toshiki Asada, Ken Kitahara, Hitomi Yuzawa, Takeya Suzuki, Hideyuki Sato, Atsuko Abe, Tadashi Fujino, Kenzaburo Kobayashi, Takanori Ikeda

Department of Cardiovascular Medicine, Toho University Faculty of Medicine, Tokyo, Japan
Room 11  10:00-11:00 Oral Presentation [O19]

**ECG Assessment 2**

**Chairs**  Koichiro Yoshioka  
Tokai University School of Medicine, Cardiology, Kanagawa, Japan  
Masatake Fukunami  
Osaka General Medical Center, Osaka, Japan

**O19-1**  Evaluation of short term beat-to-beat variability of QT interval in patients with cardiovascular disease  
Masashi Kasao1, Akira Nakazawa2, Yuki Sakai2, Takao Ohmuta3, Kazuyuki Mitsui2, Nitaro Shibata1, Tetsuro Shirai2  
1Department of Cardiology, Tokyo Metropolitan Police Hospital, Tokyo, Japan, 2Advanced Multidisciplinary Engineering, Graduate School of Advanced Science and Technology, Tokyo Denki University, Tokyo, Japan, 3Faculty of Medical Engineering, Department of Clinical Engineering, Suzuki University of Medical Science, Mie, Japan, 4Department of Cardiology, Shinjuku Mitsui Building Clinic, Tokyo, Japan

**O19-2**  High-frequency signals within the QRS complex calculated by wavelet transformation predict ventricular tachycardia vulnerability  
Yuya Aoyama1, Seiji Fukamizu1, Kiyotaka Yoshida1, Satoshi Miyazawa1, Iwanari Kawamura1, Akihiro Nakada2, Yuichi Moriyama1, Ken Arai1, Toshiki Kairara1, Motohiro Asaki1, Takeshi Kitamura1, Rintaro Hojo1, Kota Komiyama1, Tamotsu Tejima1, Mitsuhiro Nishizaki2, Harumizu Sakurada3, Masayasu Hiraoka4  
1Department of Cardiology, Tokyo Metropolitan Hiroo Hospital, Tokyo, Japan, 2Department of Cardiology, Yokohama Minami Kyosai Hospital, Kanagawa, Japan, 3Tokyo Metropolitan Health and Medical Treatment Corporation Ohkubo Hospital, Tokyo, Japan, 4Toride Kitasohma Medical Center Hospital, Ibaraki, Japan

**O19-3**  A strain rate for the assessment of myocardial repolarization time; Using two-dimensional speckle-tracking study  
Soichiro Yamashita, Koji Fukuzawa, Akihiro Yoshida, Tomoyuki Nakanishi, Akinori Matsumoto, Hiroki Konishi, Hirotochi Ichibori, Hiroshi Imada, Kiyohiro Hyogo, Ken-ichi Hirata  
Department of Internal Medicine, Division of Cardiovascular Medicine, Kobe University Graduate School of Medicine, Hyogo, Japan

**O19-4**  Circadian Variation of Heart Rate Turbulence with Cardiac Normal Subjects  
Kenichi Hashimoto1, Yuji Kasamaki1, Yasuo Okumura2, Kimie Ohkubo2, Toshiko Nakai2, Satoshi Kunimoto2, Takafumi Hiro3, Ichiro Watanabe2, Atsushi Hirayama2, Masayoshi Souma1  
1Division of General Medicine, Nihon University, School of Medicine, Tokyo, Japan, 2Division of Cardiovacular Medicine, Nihon University, School of Medicine, Tokyo, Japan
QT-RR relationship and correction in atrial fibrillation

Mina Hatsuno¹, Yuji Watari¹, Taketo Hatsuno³, Seiji Nishide¹, Mutsuki Miyagawa¹, Takeshi Yamakawa¹, Takeshi Tomihara³, Ken Kozuma¹, Taiji Furukawa¹

¹Department of Medicine, Teikyo University School of Medicine, Tokyo, Japan, ³Laboratory Medicine, Teikyo University School of Medicine, Tokyo, Japan
AF Others 1

**O20-1** Hepatic Gene Expression Profile in Human Atrial Fibrillation: Novel Insights into Cardio-hepatic Interaction in Arrhythmia

*Naomi Kanamori, Takeshi Kato, Soichiro Usui, Hiroshi Ootsuji, Takanori Yaegashi, Hiroshi Furusho, Shinichiro Takashima, Hisayoshi Murai, Shuichi Kaneko, Masayuki Takamura*

*Department of Cardiology, University of Kanazawa, Ishikawa, Japan*

**O20-2** Usefulness and comparison of the event recorder and portable ECG recorder in detecting paroxysmal atrial fibrillation

*Yukoh Hirai, Yasuyuki Tomohiro*

*Department of Cardiology, Kure Kyosai Hospital, Hiroshima, Japan*

**O20-3** Functional remodeling of left atrial appendage in patients with paroxysmal atrial fibrillation

*Kenki Ashida, Takanao Mine, Satoshi Takahashi, Hideyuki Kishima, Tohru Masuyama*

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

**O20-4** Investigation on the prevalence of atrial tachyarrhythmia in patients with anti-mitochondrial M2 antibody

*Hiroki Konishi, Koji Fukuzawa, Tomoyuki Nakanishi, Soichiro Yamashita, Akinori Matsumoto, Hirotoshi Ichibori, Kiyohiro Hyogo, Hiroshi Imada, Akihiro Yoshida, Kenichi Hirata*

*Section of Arrhythmia, Division of Cardiovascular Medicine, Department of Internal Medicine, Kobe University Hospital, Hyogo, Japan*

**O20-5** The serum brain natriuretic peptide level predicts sick sinus syndrome during ablation of persistent atrial fibrillation

*Takehiro Kimura, Kazuaki Nakajima, Shin Kashimura, Akira Kunitomi, Takahiko Nishiyama, Yoshinori Katsumata, Nobuhiro Nishiyama, Kotaro Fukumoto, Yoko Tanimoto, Yoshiyasu Aizawa, Keiichi Fukuda, Seiji Takatsuki*

*Department of Cardiology, Keio University School of Medicine, Tokyo, Japan*
Catheter ablation for atrial fibrillation using new 3D mapping system
-including the experience of precedex -

Chair
Yoshito Iesaka
Division of Cardiology, Cardiovascular Center, Tsuchiura Kyodo Hospital, Ibaraki, Japan

LS11-1 Catheter ablation for atrial fibrillation using new 3D mapping system
-including the experience of precedex -

Shigeto Naito
Cardiology Division, Gunma Prefectural Cardiovascular Center, Gunma, Japan

(Hospira Japan Co., Ltd.)
Pacemaker 1

Chairs  Motoyuki Fukuta

Department of Cardiology, Aichi Medical University School of Medicine, Aichi, Japan

Hidekazu Miyazaki

Kawasaki Municipal Tama Hospital, Kanagawa, Japan

O21-1 Clinical and ECG Characteristics in Patients with Sick Sinus Syndrome and Atrioventricular Block

Akira Kunitomi, Yoshiyasu Aizawa, Kazuaki Nakajima, Shin Kashimura, Yoshinori Katsumata, Takahiko Nishiyama, Takehiro Kimura, Nobuhiro Nishiyama, Kotaro Fukumoto, Yoko Tanimoto, Shun Kohsaka, Keiichi Fukuda, Seiji Takatsu

Cardiology Division, Department of Internal Medicine, Keio University School of Medicine, Tokyo, Japan

O21-2 The Incidence of Subclavian Venous Thrombosis in Patients Receiving Antithrombotic Agent Following Implantation of Permanent Pacemaker or Implantable Cardioverter Defibrillator

Takeya Suzuki, Hideki Koike, Ken Kitahara, Toshio Kinoshita, Hitomi Yuzawa, Hideyuki Sato, Atsuco Abe, Tadashi Fujino, Shunji Fukunaga, Kenzaburo Kobayashi, Junichi Yamazaki, Takanori Ikeda

Division of Cardiovascular Medicine, Department of Internal Medicine, Toho University Omori Medical Center, Tokyo, Japan

O21-3 Study of impact on myocardial injury and device at the time of direct current shock in device implanted patients using computer simulation

Takahito Takagi1, Mahito Noro1, Xin Zhu1, Naohiko Sahara1, Yuriko Narabayashi1, Hikari Hashimoto1, Naoshi Ito1, Yoshinari Enomoto1, Tsuyoshi Sakai1, Shingo Kujime1, Keijiro Nakamura1, Takao Sakata1, Kaoru Sugi1

1Division of Cardiovascular Medicine, Toho University Ohashi Medical Center, Tokyo, Japan, 2Biomedical Information Technology Laboratory, the University of Aizu, Fukushima, Japan, 3Division of Cardiovascular Medicine, Saiseikai Yokohamashi Tobu Hospital, Kanagawa, Japan

O21-4 Complete AV block preceding typical cardiac sarcoidosis findings and recovery of pacing threshold of right ventricular lead following steroid therapy

Makoto Furugen, Keiichi Ashikaga, Shun Nishino, Hiroshi Koiwaya, Toshiyuki Kimura, Tatsuya Nakama, Nehiro Kuriyama, Yoshisato Shibata

Division of Cardiology, Miyazaki Medical Association Hospital, Miyazaki, Japan
Necessity and Feasibility of Emergent MRI Scanning of Device Implanted Patients

Maki Ono, Makoto Suzuki, Shunsuke Kuroda, Akira Mizukami, Akihiko Matsumura, Yuji Hashimoto

Department of Cardiology, Kameda Medical Center, Chiba, Japan
### Pacemaker 2

**Chairs**
- Makoto Hirai  
  *Department of Nursing, Nagoya University Graduate School of Medicine, Aichi, Japan*
- Takeshi Yamakawa  
  *Department of Cardiology, Ageo Central General Hospital, Saitama, Japan*

<table>
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<tr>
<th>Session</th>
<th>Title</th>
<th>Authors</th>
<th>Affiliations</th>
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| **O22-1** | **Comparison of variability of the paced QRS wave duration caused by right ventricular apex pacing and septal pacing in the clinical situation** | Mariko Tanaka, Maki Oi, Yasuyo Motohashi, Kousuke Takahashi, Euihong Ko, Koji Hanazawa, Mamoru Toyofuku, Masahiko Kitada, Yousuke Yutsuki, Takashi Tamura | *Department of Cardiology, Japanese Red Cross Wakayama Medical Center, Wakayama, Japan*
| **O22-2** | **Impact of Right Ventricular Septum Pacing for Left Ventricular Function in Paced Patients with Atrioventricular Block** | Katsuhide Hayashi¹, Haruhiko Abe², Ritsuko Kohno², Masao Takahashi³, Taichi Watabe³, Hisaharu Ohe³, Yasushi Oginosawa¹, Yutaka Otsuji² | ¹*The Second Department of Internal Medicine, University of Occupational and Environmental Health, Fukuoka, Japan*, ²*Department of Heart Rhythm Management, University of Occupational and Environmental Health, Fukuoka, Japan*
| **O22-3** | **Involvement of left anterior fascicular block and clinical impact of the intra-ventricular dyssynchrony caused by right ventricular pacing among the patients with normal ejection fraction** | Masato Okada¹, Kazunori Kashiwase², Akio Hirata¹, Keisuke Ueno², Ryohei Amiya², Yasunori Ueda³ | ¹*Sakurabashi Watanabe Hospital, Osaka, Japan*, ²*Osaka Police Hospital, Osaka, Japan*, ³*Osaka National Hospital, Osaka, Japan*
| **O22-4** | **A Case with Pacing Failure Caused by Automatic Pacing Threshold Adjustment -A Pit-fall of Automatic Threshold Testing Algorithm of Pacemaker-** | Jun Kishihara, Shinichi Niwano, Hironori Nakamura, Tazuru Igarashi, Naruya Ishizue, Tamami Fujiishi, Tomoharu Yoshizawa, Jun Oikawa, Akira Satoh, Masami Murakami, Hidehira Fukaya, Junya Ako | *Department of Cardiovascular Medicine, Kitasato University School of Medicine, Kanagawa, Japan*
Stability of Intrinsic Rhythm in Pacemaker Dependent Patients during Pacemaker Replacement: Can we predict a need for temporary pacing?

Yuki Kimura, Masataka Sumiyoshi, Kosuke Fukao, Iwao Okai, Kenji Inoue, Yasumasa Fujiwara, Tomoyuki Shiozawa, Seiji Miura, Sayaka Komatsu, Haruna Tabuchi, Gaku Sekita, Hiroyuki Daida, Fuminori Odagiri, Takashi Tokano, Yuji Nakazato

1Department of Cardiology, Juntendo University Nerima Hospital, Tokyo, Japan, 2Department of Cardiology, Juntendo University School of Medicine, Tokyo, Japan, 3Department of Cardiology, Juntendo University Urayasu Hospital, Chiba, Japan
AF Clinical Study 1

Chairs
Satoru Sakagami
Department of Cardiovascular Medicine, NHO Kanazawa Medical Center, Ishikawa, Japan
Satoru Komura
Department of Cardiology, Saiseikai Kawaguchi General Hospital, Saitama, Japan

O23-1 Pre-procedural Atrial Defibrillation Threshold at the First Pulmonary Vein Isolation for Persistent Atrial Fibrillation can be Predictor of 6months Result
Kosuke Nakasuka, Yoshimasa Murakami, Satoru Sekimoto, Takayuki Yoshida, Tomoaki Saeki
Division of Cardiology, Nagoya East Medical Center, Aichi, Japan

O23-2 Prediction of Sinus Rhythm Maintenance after Catheter Ablation in Patients with Persistent Atrial Fibrillation
Naoaki Onishi, Kazuaki Kaitani, Maiko Kuroda, Yusuke Yoshikawa, Masashi Amano, Yukiko Hayama, Sari Imamura, Chisato Izumi, Yoshihisa Nakagawa
The Department of Cardiology, Tenri Hospital, Nara, Japan

O23-3 Long-time outcomes after origin-targeted unilateral pulmonary vein isolation for paroxysmal atrial fibrillation
Naomi Kanamori1, Hiroshi Furusho2, Satoru Sakagami2, Takashi Kuoyama1, Takeshi Kato1, Hisayoshi Murai1, Soichiro Usui1, Shuichi Kaneko1, Masayuki Takamura1
1Department of Cardiology, University of Kanazawa, Ishikawa, Japan, 2Department of Cardiology, Kanazawa Medical Center, Ishikawa, Japan

O23-4 Efficacy of Catheter Ablation for Long Standing Persistent Atrial Fibrillation Lasting over 5 years
Kentaro Nakai, Satoshi Shizuta, Tetsuna Kawaji, Mitsuhiko Yahata, Hiroaki Sugiyama, Koji Goto, Takeshi Kimura
Cardiovascular Medicine, Kyoto University Hospital, Kyoto, Japan

O23-5 Long term outcome of radiofrequency catheter ablation for atrial fibrillation in patients with left ventricular dysfunction
Mitsuhiko Yahata, Satoshi Shizuta, Tetsuna Kawaji, Kentaro Nakai, Hiroaki Sugiyama, Koji Goto, Takeshi Kimura
Department of Cardiovascular Medicine, Kyoto University Hospital, Kyoto, Japan
教育セミナー（心臓構造学レクチャー1）

不整脈の理解に必要な心臓の解剖（1）：右心系の解剖

井川 修
日本医科大学多摩永山病院内科・循環器内科
Arrhythmia viewing from cardiac structure : -Arrhythmia associated with TAVI-

Chair  Takashi Nitta  
Department of Cardiovascular Surgery, Nippon Medical School, Tokyo, Japan

LS12-1 Overview of TAVI in Japan  
Kentaro Hayashida  
Department of Cardiology, Keio University School of Medicine, Tokyo, Japan

LS12-2 Arrhythmia associated with TAVI : - Structure of aortic root and its surroundings -  
Osamu Igawa  
Department of Internal Medicine and Cardiology, Nippon Medical School Tama Nagayama Hospital, Tokyo, Japan  
(Edwards Lifesciences Limited)
**AF 1**

**Chairs**
Hiroshi Taniguchi  
*Division of Cardiology, Cardiovascular Center, Tsuchiura Kyodo Hospital, Ibaraki, Japan*
Kenzaburo Kobayashi  
*Department of Cardiology, Toho University Ohashi Hospital, Tokyo, Japan*

**P1-1**  
**Catheter Ablation of Long Lasting Atrial Tachycardia Arising from Left Atrial Appendage in a Pediatric Patient with Tachycardia Induced Cardiomyopathy**

Hiromi Yoshimura¹, Takuya Kiyama¹, Satoru Yamamura¹, Yu Oimatsu¹, Syunichirou Fuchigami², Akihiko Ito¹, Ryusuke Tsunoda¹, Hidetaka Yoshimatsu², Katsuki Hirai², Masahiro Migita³  
¹*Department of Cardiovascular Medicine, Japanese Red Cross Kumamoto Hospital, Kumamoto, Japan*, ²*Department of Pediatrics, Japanese Red Cross Kumamoto Hospital, Kumamoto, Japan*

**P1-2**  
**Successful Ablation with PentaRay NAV Catheter for Swallowing-Induced Atrial Tachycardia**

Yusuke Yoshikawa, Naoaki Onishi, Kazuaki Kaitani, Shunsuke Nishimura, Maiko Kuroda, Yusuke Takahashi, Masashi Amano, Yukiko Hayama, Sari Imamura, Yodo Tamaki, Soichiro Enomoto, Makoto Miyake, Toshihiro Tamura, Hirokazu Kondo, Chisato Izumi, Yoshihisa Nakagawa  
*Department of Cardiology, Tenri Hospital, Nara, Japan*

**P1-3**  
**Localized Reentrant Atrial Tachycardia after Mitral Valve Plasty and Maze Procedure**

Yuko Miki¹, Kohei Iguchi¹, Nao Yamada¹, Hidekuni Kirigaya¹, Daiki Gyotoku¹, Naoki Inuma¹, Tatsuya Nakachi¹, Kazuki Fukui¹, Toshiyuki Ishikawa²  
¹*Cardiology, Kanagawa Cardiovascular and Respiratory Center, Kanagawa, Japan*, ²*Yokohama City University Hospital, Kanagawa, Japan*

**P1-4**  
**Usefulness of the PentaRay® NAV catheter to assess the ablation line of the Maze-procedure in a case of post-operative atrial flutter**

Takashi Kusayama, Hiroshi Furusho, Naomi Kanamori, Takeshi Kato, Shinichiro Takashima, Hisayoshi Murai, Soichiro Usui, Shuichi Kaneko, Masayuki Takamura  
*The Department of Cardiology, Kanazawa University Hospital, Ishikawa, Japan*
P1-5  Fractionated potential in scar region recorded with mini electrodes embedded on 8-mm non-irrigated ablation catheter in a patient with atrial tachycardia and tetralogy of Fallot
Ken Kato, Koichiro Ejima, Morio Shoda, Tetsuyuki Manaka, Daigo Yagishita, Ryuta Henmi, Kuniaki Suwa, Takashi Mizuki, Michiko Imai, Nobuhisa Hagiwara
Department of Cardiology, Tokyo Women's Medical University, Tokyo, Japan

P1-6  Importance of conduction velocity slowing induced by sodium channel blockade during atrial flutter for the development of spontaneous 1 to 1 atrioventricular conduction
The Department of Cardiovascular Medicine, Nippon Medical School, Tokyo, Japan

P1-7  Identification of the Anatomic Location of Focal Atrial Tachycardias Using Synthesized 18 Lead Electrocardiography
Masayuki Ishimura, Marehiko Ueda, Kazuo Miyazawa, Takatsugu Hashiguchi, Naotaka Hashiguchi, Yoshio Kobayashi
Department of Cardiovascular Medicine, Chiba University Hospital, Chiba, Japan
**Chaired Poster (1st Lane)  10:49-11:31 Chaired Poster Session [P2]**

**AF 2**

**Chairs**
- Yoshihisa Abe
  Department of Cardiology, Research Institute for Brain and Blood Vessels Akita, Akita, Japan
- Takashi Ashihara
  Department of Cardiovascular Medicine, Shiga University of Medical Science, Shiga, Japan

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**P2-1**

Two difficult cases of a perimiral atrial flutter ablation due to rare structural anomaly

Keiko Takahashi, Yasuo Okumura, Ichiro Watanabe, Koichi Nagashima, Kazumasa Sonoda, Rikitake Kogawa, Naoko Sasaki, Kazuki Iso, Sayaka Kurokawa, Satoshi Kunimoto, Toshiko Nakai, Kimie Ohkubo, Atsushi Hirayama

Division of Cardiology, Department of Medicine, Nihon University School of Medicine, Tokyo, Japan

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**P2-2**

Entrainment pacing was useful to estimate reentrant circuit of atrial tachycardia in a case of Tetralogy of Fallot after surgical operation

Shunsuke Watanabe¹, Hiroto Takeda¹, Yuichiro Jin¹, Koko Kanazawa¹, Goro Ishida¹, Noriko Endo¹, Takeo Niitsuma¹, Nobuo Komatsu¹, Yasuchika Takeishi²

¹The Cardiovascular Center, Ohta Nishinouchi Hospital, Ohta General Hospital Foundation, Fukushima, Japan, ²The Department of Cardiology and Hematology, Fukushima Medical University, Fukushima, Japan

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**P2-3**

Ablation of focal atrial tachycardia originating from the para-hisian region using new mapping concepts

Tae Ishikawa¹, Koji Azegami¹, Kazuya Murata¹, Keita Handa¹, Yoshimitsu Otsuka¹, Shingo Watanabe², Kaoru Sakurai², Kaoru Okishige², Kenzo Hirao², Mitsuaki Isobe²

¹Department of Cardiovascular Medicine, Shinyurigaoka General Hospital, Kanagawa, Japan, ²Department of Cardiovascular Medicine, Tokyo Medical and Dental University, Tokyo, Japan, ³Heart Center, Yokohama City Bay Red Cross Hospital, Kanagawa, Japan

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**P2-4**

Transseptal puncture technique for autologous pericardium patch using a cutting balloon

Jiro Hiroki¹, Yukio Hosaka¹, Yuki Fujihara¹, Kazuyoshi Takahashi¹, Norihito Nakamura¹, Asami Kashiwa¹, Akiko Sanada¹, Keiichi Tsuchida¹, Kazuyuki Ozaki¹, Shigeto Naito², Hirotaka Oda¹

¹The Department of Cardiology, Niigata City General Hospital, Niigata, Japan, ²Division of Cardiology, Gunma Prefectural Cardiovascular Center, Gunma, Japan

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**P2-5**

Focal Left Atrial Tachycardia after Several Atrial Fibrillation Ablation Procedures

Tsugiyoshi Yamazaki¹, Sou Takenaka², Tatsuhiko Murase¹, Houjou Sasaki¹, Akihiko Ueno², Hideo Takahashi¹, Noritoshi Ito¹, Hiroshi Fukunaga¹, Osamu Murai¹

¹Department of Cardiology, Kawasaki Saiwai Hospital, Kanagawa, Japan, ²Department of Cardiology, Yokohama General Hospital, Kanagawa, Japan
Atrial Tachycardia Originated from Sinus Venosus

Sou Takenaka, Motosu Ando, Naoki Saito, Shingo Kujime, Daisuke Iida, Yuzuru Yambe
Department of Cardiology, Yokohama General Hospital, Kanagawa, Japan
### P3-1 The correlation between left atrial arrhythmogenic substrate and pulmonary vein flow velocity in the patients with atrial fibrillation

**Hideharu Okamatsu**, Masataka Kajiwara, Yasuaki Tanaka, Takuo Tsurugi, Junjiro Koyama, Toshihiro Honda  
*Saiseikai Kumamoto Hospital, Kumamoto, Japan*

### P3-2 Comparison of Dominant Frequency with Atrial Fibrillation Cycle Length Derived from Bipolar and Unipolar Electrograms

**Rikitake Kogawa**, Yasuo Okumura, Ichiro Watanabe, Koichi Nagashima, Kazumasa Sonoda, Naoko Sasaki, Kazuki Iso, Keiko Takahashi, Sayaka Kurokawa, Kimie Ohkubo, Toshiko Nakai, Atsushi Hirayama  
*Division of Cardiology, Department of Medicine, Nihon University School of Medicine, Tokyo, Japan*

### P3-3 Visualization of electrophysiologically defined junction between the right atrium and the superior vena cava

*Department of Cardiology, Keio University School of Medicine, Tokyo, Japan*

### P3-4 Localization and Reproducibility of Rotational Activities in Patients with Atrial Fibrillation

*Nara Prefecture Western Medical Center, Nara, Japan*

### P3-5 Efficacy of CATHPAX AF for the reduction of radiation exposure during ablation of atrial fibrillation

**Takeshi Tobiume**, Sachiko Bando, Tomomi Matsuura, Takeshi Soeki, Masataka Sata  
*Department of Cardiology, Tokushima University, Tokushima, Japan*
### Chaired Poster (1st Lane) 15:15-15:50 Chaired Poster Session [P4]

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<thead>
<tr>
<th>Chairs</th>
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<td>Satoru Komura</td>
<td>Chairs Satoru Komura, Saiseikai Kawaguchi General Hospital, Saitama, Japan</td>
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<td>Takahiko Nagase</td>
<td>Chairs Takahiko Nagase, Department of Cardiology, Saitama Medical University, International Medical Center, Saitama, Japan</td>
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**P4-1** Atrial Fibrillation (AF) Caused by the Disagreement between Centroid Position Determined in Palatal Area and Center of Physiological Stable Region (PSR)

Tsuneo Sakai

*Sakai Dental Clinic, Tochigi, Japan*

**P4-2** Ablation of persistent atrial fibrillation unmasks the left ventricular remodeling

Takehito Tokuyama, Yukiko Nakano, Shunsuke Tomomori, Hiroya Matsumura, Yoshikazu Watanabe, Hiroshi Kawazoe, Yasuki Kihara

*Department of Cardiovascular Medicine, Hiroshima University Graduate School of Biomedical and Health Sciences, Hiroshima, Japan*

**P4-3** Differences in the Anticoagulation Strategy for Atrial Fibrillation between Cardiologists and Non-cardiologist

Akira Satoh¹, Hidehira Fukaya², Jun Oikawa², Nakako Yasuno³, Takaaki Kubo³, Shinichi Niwano², Junya Ako³

¹Department of Cardiovascular Medicine, Yamato Municipal Hospital, Kanagawa, Japan, ²Department of Cardiovascular Medicine, Kitasato University, School of Medicine, Kanagawa, Japan

**P4-4** Effect of Atrial Fibrillation on Sleep Quality in Stable Chronic Heart Failure

Shozo Konishi, Kei Nakamoto, Yasuhiro Ichibori, Hitoshi Minamiguchi, Tomoaki Nakano, Kentaro Ozu, Hiroya Mizuno, Tomohito Ohtani, Osamu Yamaguchi, Yuji Okuyama, Yasushi Sakata

*Department of Cardiovascular Medicine, Graduate School of Medicine, Osaka University, Osaka, Japan*

**P4-5** Two Sheath Approach in Left Atrium Resulted in Less Frequent Patent Foramen after Trans-septal Puncture than 3 Sheath Approach

Takafumi Oka, Yoji Tokunaga, Koji Tanaka, Yuko Toyoshima, Nobuaki Tanaka, Yasushi Koyama, Koichi Inoue, Kenshi Fujii

*Cardiovascular Division, Sakurabashi Watanabe Hospital, Osaka, Japan*
AF 5

Chairs
Kohei Yamashiro
Heart Rhythm Center, Takatsuki General Hospital, Osaka, Japan
Takeshi Tobiume
Department of Cardiology, Tokushima University Hospital, Tokushima, Japan

P5-1 Filtered P Wave Duration by Vector Magnetocardiography Can Evaluate Conduction Disturbance in Left Atrium
Yuki Hasegawa¹, Satomi Hamada¹, Takuro Nishimura², Yasuhiro Shirai³, Susumu Tao², Takeshi Sasaki², Mihoko Kawabata¹, Masahiko Goya², Yuki Sumi³, Mitsuaki Isobe³, Kenzo Hirao³, Tetsuo Sasano¹
¹Department of Biofunctional Informatics, Tokyo Medical and Dental University, Tokyo, Japan, ²Heart Rhythm Center, Tokyo Medical and Dental University, Tokyo, Japan, ³Department of Cardiovascular Medicine, Tokyo Medical and Dental University, Tokyo, Japan

P5-2 Novel Dielectric Blood Coagulometry Can Detect Increased Coagulability in Subjects with High CHADS2 Score
Yuki Hasegawa¹, Satomi Hamada¹, Takuro Nishimura², Yasuhiro Shirai³, Susumu Tao², Takeshi Sasaki², Mihoko Kawabata¹, Masahiko Goya², Yuki Sumi³, Mitsuaki Isobe³, Kenzo Hirao³, Tetsuo Sasano¹
¹Department of Biofunctional Informatics, Tokyo Medical and Dental University, Tokyo, Japan, ²Heart Rhythm Center, Tokyo Medical and Dental University, Tokyo, Japan, ³Department of Cardiovascular Medicine, Tokyo Medical and Dental University, Tokyo, Japan

P5-3 Evaluation of the Right Atrial Appendage by Transesophageal Echocardiography in Patients with Atrial Fibrillation
Junpei Shoda¹, Yoshiyuki Hama¹, Haruka Fujimaki¹, Taishi Kuwahara², Noriko Eguchi³, Ikuto Terabayashi¹, Kohei Kamishita¹, Bi Katsu¹, Shuzo Tanaka¹, Norimasa Tonoike¹, Kyokushi Hou¹, Tai Sekine¹, Yuji Matsudo¹, Masashi Yamamoto¹, Toshiharu Himi¹
¹Division of Cardiology, Kimitsu Chuo Hospital, Chiba, Japan, ²Cardiovascular Center, Yokosuka Kyousai Hospital, Kanagawa, Japan

P5-4 Withdrawn

P5-5 Low Dose Colchicine Can Reduce Atrial Fibrillation Recurrence after Pulmonary Vein Isolation
Yasuyuki Egami, Masami Nishino, Ryu Shutta, Nobuhiko Makino, Naoki Mori, Akihiro Tanaka, Naotaka Okamoto, Hiroki Yorifuji, Kiyoshi Masuyama, Yu Nushiho, Koji Yasumoto, Keisuke Yasumura, Jun Tanouchi
Department of Cardiology, Osaka Rosai Hospital, Osaka, Japan
AF 6

Chairs
Kikuya Uno
Sapporo Cardiovascular Center / Heart Rhythm Center, Hokkaido, Japan
Kimie Ohkubo
Department of Cardiology, Nihon University Itabashi Hospital, Tokyo, Japan

P6-1 The Relevance of Systemic Inflammation for Atrial Fibrillation Recurrence after Persistent Atrial Fibrillation Ablation
Toru Adachi, Yasuhiro Yokoyama, Akira Kimata, Yutaro Nishi, Koichiro Niwa
Cardiovascular Center, St. Luke's International Hospital, Tokyo, Japan

P6-2 Safety and Efficacy of Novel Oral Anticoagulants for Cardioversion in Patients with Supraventricular Tachycardia
Nobuhiko Makino, Yasuyuki Egami, Ryu Shutta, Masami Nishino
Division of Cardiology, Osaka Rosai Hospital, Osaka, Japan

P6-3 Prothrombin time (PT) of apixaban can be estimated by age and PT of warfarin to check up effectiveness
Naoko Osaka, Shiro Katayama
Department of Pharmacy, Nippon Medical School Hospital, Tokyo, Japan

P6-4 Efficacy and Safety of the Reduced Dosage Apixaban in Japanese Patients with Atrial Fibrillation
Kazuhiro Naito, Yasushi Suzuki, Isao Kato, Yoshitaka Ito, Motoyuki Fukuta, Toru Iwa, Tetsuya Amano
Department of Cardiology, Aichi Medical University, Aichi, Japan

P6-5 Safety of Low-Dose Bepridil in Patients with Atrial Tachyarrhythmia
Kazuto Kujira, Daisuke Yoshimoto, Mitsuaki Itoh, Yuichiro Sakamoto, Kohei Yamashiro, Takahiko Suzuki
Department of Cardiovascular Medicine, Toyohashi Heart Center, Aichi, Japan

P6-6 Clinical investigation of the focal cryoablation catheter of 8-mm tip for ablation at tricuspid annulus in patients with atrial flutter of common variety
Mitsumi Yamashita, Kaoru Okishige, Naohiko Kawaguchi, Nobutaka Kato, Tomofumi Nakamura, Hideshi Aoyagi
Department of Cardiology, Yokohama Bay Red Cross Hospital, Kanagawa, Japan
Wednesday, 29 July

Chaired Poster (2nd Lane)  10:00-10:35 Chaired Poster Session [P7]

Devices 1

Chairs  
Yoshifumi Ikeda  
*Saitama Medical University International Medical Center Cardiology, Saitama, Japan*

Michio Ogano  
*Department of Cardiovascular Medicine, Shizuoka Medical Center, Shizuoka, Japan*

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**P7-1**  Neither a distance nor a time may become an obstacle of pacemaker clinic consultation. An observational study in Asahi General Hospital

Kazutoshi Sato, Satoshi Kodera, Kotaro Miyagi, Junji Kanda  
*Department of Cardiology, Asahi General Hospital, Chiba, Japan*

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**P7-2**  Coexisting Hyponatremia is Subjected to Present Sinus Arrest in Hyperkalemia

Takeshi Ideguchi, Toshihiro Tsuruda, Kengo Kuroki, Tetsunori Ishikawa, Kazuo Kitamura  
*Departments of First Internal Medicine, University of Miyazaki, Miyazaki, Japan*

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**P7-3**  Assessment of left ventricular dyssynchrony evaluated by phase analysis on cardiac scintigraphy in patients with permanent pacemaker

Tomohiko Sakatani, Atsushi Kyodo, Yumika Tsuji, Akira Sakamoto, Kohei Kawamura, Toru Tanigaki, Yoshinori Tsubakimoto, Koji Isodono, Shinzo Kimura, Akiko Matsuo, Keiji Inoue, Hiroshi Fujita  
*Department of Cardiology, Japanese Red Cross Kyoto Daini Hospital, Kyoto, Japan*

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**P7-4**  Chronic kidney disease as a risk factor for CRTD recipients

Takuo Tsurugi, Masataka Kajiwara, Hideharu Okamatsu, Yasuaki Tanaka, Junjiroh Koyama, Yoshihiro Honda  
*Division of Cardiology, Saiseikai Kumamoto Hospital Cardiovascular Center, Kumamoto, Japan*

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**P7-5**  Efficacy of Quadripolar Left Ventricular Pacing Lead for Cardiac Resynchronization Therapy

Hiroshi Fukunaga, Kanki Inoue, Mayuko Yagawa, Kohei Tanizaki, Jun Umemura, Hitonobu Tomoike  
*Department of Cardiology, Sakakibara Heart Institute, Tokyo, Japan*
VT 1

Chairs
Fumito Miyoshi
Department of Cardiology, Showa University Koto Toyosu Hospital, Tokyo, Japan
Yukio Sekiguchi
Cardiovascular Division, Faculty of Medicine, University of Tsukuba, Ibaraki, Japan

P8-1 Ventricular fibrillation in young adult patient due to asymptomatic vasospasitic angina: A case report
Jun Osada
The Department of Cardiology, Yokosuka General Hospital Uwamachi, Kanagawa, Japan

P8-2 Feasibility of PaSo guided catheter ablation for ventricular premature complexes
Mitsuru Yoshino, Hiroshi Tasaka, Masatomo Ozaki, Noriyuki Ohashi, Yoji Okamoto, Satoki Fujii, Kazushige Kadota, Kazuaki Mitsudo
Department of Cardiology, Kurashiki Central Hospital, Okayama, Japan

P8-3 Takotsubo Cardiomyopathy in a Patient with Hypertrophic Occlusive Cardiomyopathy and Advanced Atrioventricular Block after VT Study
Mariko Kawasaki, Shinji Ishimaru, Risa Kakinoki, Masahiro Takahata, Motohito Tadokoro, Shunsuke Kitani, Teppei Sugaya, Tadashi Igarashi, Hiroaki Okabayashi, Jungo Furuya, Yasumi Igarashi, Keiichi Igarashi
The Department of Cardiology, JCHO Hokkaido Hospital, Hokkaido, Japan

P8-4 Successfully treated ventricular tachycardia of sarcoidosis patient by high energy irrigation ablation
Hidetaka Ito, Haruo Mitani, Minoru Ohno
Cardiovascular Center, Toranomon Hospital, Tokyo, Japan

P8-5 A Case of Implantable Cardioverter Defibrillator Implantation for a Young Patient Survived from Ventricular Fibrillation with Hypertrophic Cardiomyopathy
Kento Mori, Toshihiko Goto, Kazuaki Wakami, Nobuyuki Ohte
Department of Cardio-Renal Medicine and Hypertension, Nagoya City University, Aichi, Japan
Examination of the outcomes of radiofrequency catheter ablation of ventricular arrhythmias (arising from the right ventricular outflow tract) with pace mapping in pediatric patients

Shuichiro Yoshida¹, Yoko Yoshida¹, Tsugutoshi Suzuki¹, Yoshihide Nakamura²

¹The Department of Pediatric Electrophysiology, Osaka City General Hospital, Osaka, Japan, ²The Department of Pediatrics, University of Kinki, Osaka, Japan
**Devices 2**

**Chairs**
- Taishi Hirahara  
  *Department of Cardiology, Saitama Medical Center, Saitama Japan*
- Takashi Noda  
  *Department of Cardiovascular Medicine, National Cerebral and Cardiovascular Center, Osaka, Japan*

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**P9-1**  
**Evaluation of Relationship Between Adequate Lead Fixation and Current of Injury at Atrial Pacing Sites**

Daisuke Fujibayashi¹, Norishige Morita², Shigetaka Kanda¹, Takayuki Iida², Tadashi Hashida¹, Akira Ueno², Mari Amino², Koichiro Yoshioka³, Yoshinori Kobayashi³  
¹Division of Cardiology, Department of Medicine, Tokai University Hospital, Kanagawa, Japan, ²Division of Cardiology, Department of Medicine, Tokai University Hachioji Hospital, Tokyo, Japan

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**P9-2**  
**Complete pacemaker lead fracture resulting from lead entrapment between generator can and the first rib**

Hiroshi Narasaki, Chikaya Omichi, Daisuke Fujii  
*Department of Cardiology, JCHO Tokyo Shinjuku Medical Center, Tokyo, Japan*

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**P9-3**  
**A case of pacemaker infection with another side subclavian vein obstruction, salvaged by pacemaker removal and re-implantation with pocket change by right axillary subpectoral approach**

Tatsunori Ikeda¹, Manabu Fujimoto³, Munenori Oota¹, Takashi Fujita³, Suguru Kiyama³, Kazuyasu Okeie¹, Masakazu Yamamoto²  
¹Department of Cardiology, Koseiren Takaoka Hospital, Toyama, Japan, ²Department of Internal Medicine, Koseiren Takaoka Hospital, Toyama, Japan

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**P9-4**  
**Dyssynchronous heart failure (DHF) in narrow QRS -The factor of CRT nonresponder**

Makoto Tamura  
*The Department of Cardiology, Misono Hospital, Niigata, Japan*

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**P9-5**  
**Usefulness of Remote Monitoring System on Early Detection of ICD Shock Failure -A Case Report-**

Masateru Kondo, Koji Fukuda, Makoto Nakano, Masato Segawa, Michinori Hirano, Takahiko Chiba, Hiroaki Shimokawa  
*The Department of Cardiovascular Medicine, Tohoku University Graduate School of Medicine, Miyagi, Japan*
**Wednesday, 29 July**

**Chaired Poster (2nd Lane)  15:15-15:50 Chaired Poster Session [P10]**

**VT 2**

**Chairs**

Yasuya Inden  
*Department of Cardiology, Nagoya University, Aichi, Japan*

Keiichi Inada  
*Department of Cardiology, The Jikei University Daisan Hospital, Tokyo, Japan*

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**P10-1**  **The ECG criterion of successful catheter ablation for idiopathic ventricular arrhythmia originating from right ventricular septum below His bundle region**

Hiroshi Taniguchi, Makoto Araki, Noboru Ichihara, Takamitsu Takagi, Jin Iwasawa, Akio Kuroi, Hiroaki Nakamura, Shinsuke Miyazaki, Hitoshi Hachiya, Yoshito Iesaka  
*Division of Cardiology, Cardiovascular Center, Tsuchiura Kyodo Hospital, Ibaraki, Japan*

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**P10-2**  **Evaluation of the activation spread in patients with intraventricular conduction disturbance using 3D electro-anatomical map: Conduction block and conduction delay in the left ventricle**

Yoshiaki Yui, Akihiko Nogami, Eiko Sai, Yasutoshi Shinoda, Ahemd Talib, Kojiro Ogawa, Mitsuhiro Fukada, Keita Masuda, Takeshi Machino, Kenji Kuroki, Miyako Igarashi, Yukio Sekiguchi, Kazutaka Aonuma  
*The Division of Cardiovascular Medicine, University of Tsukuba, Ibaraki, Japan*

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**P10-3**  **High dose of exposure to γ-radiation suppressed conduction properties and the expression of connexin43 in the intercalated disk in mice**

Tomonori Igarashi  
*Department of Occupational Toxicology, Institute of Industrial Ecological Science, University of Occupational and Environmental Health, Fukuoka, Japan*

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**P10-4**  **Low dose of exposure to organic solvents decreased the expression of connexin43 in human ventricular cardiomyocytes**

Tomonori Igarashi  
*Department of Occupational Toxicology, Institute of Industrial Ecological Science, University of Occupational and Environmental Health, Fukuoka, Japan*

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**P10-5**  **Proarrhythmic potential of the rabbit heart under bradycardiac conditions of acute and chronic atrioventricular block**

Mihoko Hagiwara, Megumi Aimoto, Akira Takahara  
*Pharmacology and Therapeutics, Faculty of Pharmaceutical Sciences, Toho University, Chiba, Japan*
Chaired Poster (2nd Lane) 15:50-16:25 Chaired Poster Session [P11]

ECG Assessment 1

Chairs
Shigeyuki Watanabe
Department of Cardiovascular Medicine, Mito Kyodo General Hospital, Ibaraki, Japan
Keiko Toyohara
Department of Pediatric Cardiology, Tokyo Women's Medical University, Tokyo, Japan

P11-1 Weekly stability of short term beat-to-beat variability of QT interval in healthy volunteers
Akira Nakazawa¹, Yuki Sakai¹, Takao Ohmuta², Kazuyuki Mitsui², Masashi Kasao³, Nitaro Shibata⁴
¹Tokyo Denki University, Tokyo, Japan, ²Suzuka University of Medical Science, Mie, Japan, ³Tokyo Metropolitan Police Hospital, Tokyo, Japan, ⁴Shinjuku Mitsui Building Clinic, Tokyo, Japan

P11-2 Association between J wave and occurrence of Ventricular fibrillation in patients with vasospastic angina
Yuki Osaka¹, Yuichi Ono¹, Sawako Yada¹, Taku Fukushima¹, Kenji Koura¹, Tomoko Manno¹, Toru Miyazaki¹, Ken Kurihara¹, Shigeo Shimizu¹, Kenichiro Otomo¹, Kenzo Hirao², Mitsuaki Isobe³
¹Department of Cardiology, Ome Municipal General Hospital, Tokyo, Japan, ²Heart Rhythm Center, Tokyo Medical and Dental University, Tokyo, Japan, ³Department of Cardiovascular Medicine, Tokyo Medical and Dental University, Tokyo, Japan

P11-3 Changes in the coefficient of variation of ECG R-R intervals at the start of diabetes dietary therapy and their relationship with body weight
Mitsuru Ikeya¹, Takuya Yoshida²
¹Ikeya Inn, Shizuoka, Japan, ²University of Shizuoka, Shizuoka, Japan

P11-4 Subcellular Distribution of Cardiac Sodium Channels Associated with Phase-2 Reentry Initiation
Kunichika Tsumoto, Yoshihisa Kurachi
Department of Pharmacology, Graduate School of Medicine, Osaka University, Osaka, Japan

P11-5 Changes of Heart Rate Variability after Cather Ablation Procedure to Paroxysmal Atrial Fibrillation: Comparison of Acute Phase and Chronic Phase
Hideyuki Sato, Tadashi Fujino, Hideki Koike, Ken Kitahara, Toshio Kinoshita, Hitomi Yuzawa, Takeya Suzuki, Shunji Fukunaga, Kenzaburo Kobayashi, Atsuko Abe, Takanori Ikeda
Department of Cardiovascular Medicine, Toho University Faculty of Medicine, Tokyo, Japan
Problem Statement

The aim of this study is to...
P12-6 Impact of connexin45 knockout on the cardiac conduction system in different age adult mice

Akiko Seki¹, Nobuhisa Hagiwara²
¹Department of Cardiology, Support Center for Women Health Care Professionals and Researchers, Tokyo Women's Medical University, Tokyo, Japan, ²Department of Cardiology, Tokyo Women's Medical University, Tokyo, Japan

P12-7 Stabilization of Kv1.5 Channel Protein by Olprinone

Ryo Endo¹, Yasutaka Kurata², Peili Li³, Kumi Morikawa⁴, Tatehito Kondo⁵, Kazuyoshi Ogura⁶, Junichiro Miake⁶, Kazuhiro Yamamoto⁶, Yasuaki Shirayoshi⁶, Ichiro Hisatome⁶
¹Department of Anesthesiology, Faculty of Medicine, Tottori University, Tottori, Japan, ²Department of Physiology, Kanazawa Medical University, Ishikawa, Japan, ³Division of Regenerative Medicine and Therapeutics, Department of Genetic Medicine and Regenerative Therapeutics, Tottori University Graduate School of Medical Science, Tottori, Japan, ⁴Center for Promoting Next-Generation Highly Advanced Medicine, Tottori University Hospital, Tottori, Japan, ⁵Department of Cardiovascular Medicine, Tottori University Faculty of Medicine, Tottori, Japan