

# Program

*Friday, 31 July*

## Therapeutic Strategy for Ventricular Tachycardia—"The New Concepts"—

**Chairs** Hideo Mitamura

*Tachikawa Hospital, Tokyo, Japan*

**Harumizu Sakurada**

*Tokyo Metropolitan Health and Medical Treatment Corporation Ohkubo Hospital, Tokyo, Japan*

### SP11-1 Epicardial ablation for ventricular tachycardia: How can complications be prevented?

Seiji Fukamizu<sup>1</sup>, Takeshi Kitamura<sup>1</sup>, Rintaro Hojo<sup>1</sup>, Kiyotaka Yoshida<sup>1</sup>, Satoshi Miyazawa<sup>1</sup>, Akihiro Nakada<sup>1</sup>, Iwanari Kawamura<sup>1</sup>, Yuichi Moriyama<sup>1</sup>, Ken Arai<sup>1</sup>, Toshiki Kaihara<sup>1</sup>, Motohiro Asaki<sup>1</sup>, Yuya Aoyama<sup>1</sup>, Kota Komiyama<sup>1</sup>, Tamotsu Tejima<sup>1</sup>, Mitsuhiro Nishizaki<sup>2</sup>, Harumizu Sakurada<sup>3</sup>, Masayasu Hiraoka<sup>4</sup>

<sup>1</sup>Department of Cardiology, Tokyo Metropolitan Hiroo Hospital, Tokyo, Japan, <sup>2</sup>Department of Cardiology, Yokohama Minami Kyosai Hospital, Kanagawa, Japan, <sup>3</sup>Tokyo Metropolitan Health and Medical Treatment Corporation Ohkubo Hospital, Tokyo, Japan, <sup>4</sup>Toride Kitasohma Medical Center Hospital, Ibaraki, Japan

### SP11-2 Endo-Epicardial Substrate-Based Approach to Ventricular Tachycardia Ablation Targeting Local Abnormal Ventricular Activities

Yuki Komatsu<sup>1</sup>, Michel Haissaguerre<sup>2</sup>, Pierre Jais<sup>2</sup>

<sup>1</sup>Cardiology Division, Yokohama Rosai Hospital, Kanagawa, Japan, <sup>2</sup>Department of Cardiac Electrophysiology, Hopital Cardiologique du Haut-Leveque, CHU Bordeaux, Bordeaux, France

### SP11-3 The usefulness of the ratio of low voltage zone in endocardial unipolar voltage map to epicardial bipolar voltage map for catheter ablation of ventricular tachycardia

Koji Miyamoto<sup>1</sup>, Takashi Noda<sup>1</sup>, Kazuhiro Satomi<sup>2</sup>, Mitsuru Wada<sup>1</sup>, Ikutaro Nakajima<sup>1</sup>, Kohei Ishibashi<sup>1</sup>, Hideo Okamura<sup>1</sup>, Takeshi Aiba<sup>1</sup>, Shiro Kamakura<sup>1</sup>, Kengo Kusano<sup>1</sup>

<sup>1</sup>Department of Cardiovascular Medicine, National Cerebral and Cardiovascular Center, Osaka, Japan, <sup>2</sup>Department of Cardiology, Tokyo Medical University Hachioji Medical Center, Tokyo, Japan

### SP11-4 Ventricular arrhythmias near the distal great cardiac vein: A challenging arrhythmia for ablation

Koichi Nagashima<sup>1</sup>, Usha B. Tedrow<sup>2</sup>, Bruce A. Koplan<sup>2</sup>, Gregory F. Michaud<sup>2</sup>, Roy M. John<sup>2</sup>, Laurence M. Epstein<sup>2</sup>, Michifumi Tokuda<sup>2</sup>, Keiichi Inada<sup>2</sup>, William G. Stevenson<sup>2</sup>

<sup>1</sup>Division of Cardiology, Department of Medicine, Nihon University School of Medicine, Tokyo, Japan, <sup>2</sup>Arrhythmia Unit, Cardiovascular Division, Brigham and Women's Hospital, USA

# Friday, 31 July

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**SP11-5 Determining the Optimal Ablation Site for Coronary Cusp and Pulmonary Artery Ventricular Tachycardia in Patients With and Without Discrete Prepotentials**

**Hitoshi Hachiya**<sup>1</sup>, Makoto Araki<sup>1</sup>, Noboru Ichihara<sup>1</sup>, Takamitsu Takagi<sup>1</sup>, Jin Iwasawa<sup>1</sup>, Akio Kuroi<sup>1</sup>, Hiroaki Nakamura<sup>1</sup>, Shinsuke Miyazaki<sup>1</sup>, Hiroshi Taniguchi<sup>1</sup>, Yasuteru Yamauchi<sup>3</sup>, Kenzo Hirao<sup>2</sup>, Yoshito Iesaka<sup>1</sup>

<sup>1</sup>Division of Cardiology, Cardiovascular Center, Tsuchiura Kyodo Hospital, Ibaraki, Japan, <sup>2</sup>Tokyo Medical and Dental University, Heart Rhythm Center, Tokyo, Japan, <sup>3</sup>Department of Cardiology Musashino Red Cross Hospital, Tokyo, Japan

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**SP11-6 Clinical and electrocardiographic characteristics of idopathic ventricular tachycardia originating from the cardiac crux**

**Mitsuharu Kawamura**, Yumi Munetsugu, 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

## Balloon Technology for AF Ablation Current Status and Future

**Chairs** Kenzo Hirao

*Tokyo Medical and Dental University, Heart Rhythm Center, Tokyo, Japan*

**Koichiro Kumagai**

*Heart Rhythm Center, Fukuoka Sanno Hospital, Fukuoka, Japan*

### SP12-1 Cryo-balloon ablation for paroxysmal atrial fibrillation

**Kaoru Okishige**

*Heart Center, Yokohama-City Bay Red Cross Hospital, Kanagawa, Japan*

### SP12-2 New strategy for atrial fibrillation ablation using a radiofrequency hot balloon catheter—Concept and pitfalls for preventing balloon specific complications—

**Hiroshi Sohara, Satoshi Higuchi, Yoshinori Nakamura, Minoru Ihara, Yoshio Yamaguchi, Shutaro Satake**

*The Heart Rhythm Center, Hayama Heart Center, Kanagawa, Japan*

### SP12-3 Laser balloon ablation

**Boris Schmidt**

*Cardioangiologisches Centrum Bethanien, Germany*

### SP12-4 Acute efficacy of cryoballoon vs irrigated radiofrequency ablation for the treatment of paroxysmal atrial fibrillation

**Hideko Toyama, Koichiro Kumagai**

*Heart Rhythm Center, Fukuoka Sanno Hospital, Fukuoka, Japan*

### SP12-5 Cryothermal Pulmonary Vein Isolation in Patients with Paroxysmal Atrial Fibrillation: Three-minute Freeze Technique using one 28-mm Second-generation Cryoballoon

**Shinsuke Miyazaki, Makoto Araki, Noboru Ichihara, Takamitsu Takagi, Jin Iwasawa, Akio Kuroj, Hiroaki Nakamura, Hiroshi Taniguchi, Hitoshi Hachiya, Yoshito Iesaka**

*Division of Cardiology, Cardiovascular Center, Tsuchiura Kyodo Hospital, Ibaraki, Japan*

# Friday, 31 July

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**SP12-6 Cryoballoon ablation for AF: Summary of the Japanese Post-Market Survey (PMS)**

**Ken Okumura<sup>1</sup>, Kazuo Matsumoto<sup>2</sup>, Akihiko Nogami<sup>3</sup>, Yoshinori Kobayashi<sup>4</sup>**

*<sup>1</sup>Department of Cardiology, Hirosaki University Graduate School of Medicine, Aomori, Japan, <sup>2</sup>Department of Cardiology, Higashimatsuyama Medical Association Hospital, Saitama, Japan, <sup>3</sup>Department of Cardiology, Tsukuba University Graduate School of Medicine, Ibaraki, Japan, <sup>4</sup>Department of Cardiology, Tokai University Hachioji Hospital, Tokyo, Japan*

**Room 1** 11:50-12:50 Luncheon Seminar25 [LS25]

## **120,000 Cryo ablations Worldwide: What did we learn? ★**

**Chair** Ken Okumura

*Hirosaki University Graduate School of Medicine, Department of Cardiology, Aomori, Japan*

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**LS25-1** 120,000 Cryo ablations Worldwide: What did we learn?

**Andreas Metzner**

*Asklepios Klinik St. Georg , Germany*

*(Medtronic Japan Co., Ltd.)*

# Friday, 31 July

**Room 1** 13:00-14:30 Symposium13 [SP13]

## Resolution of the Mechanism of Atrial Fibrillation and Its Application 2—Rotor Mapping Its Theory and Reality—★

**Chairs** Ken Okumura

*Department of Cardiology, Hirosaki University Graduate School of Medicine, Aomori, Japan*

**Shih-Ann Chen**

*National Yang Ming University, Taiwan*

### SP13-1

**Shih-Ann Chen**

*National Yang Ming University, Taiwan*

### SP13-2 Rotor mapping and atrial fibrillation (AF) ablation

**Takeshi Tsuchiya<sup>1</sup>, Takashi Ashihara<sup>2</sup>, Takanori Yamaguchi<sup>1,3</sup>, Akira Fukui<sup>1</sup>, Yasutsugu Nagamoto<sup>1</sup>**

*<sup>1</sup>EP Expert Doctors-Team Tsuchiya, Kumamoto, Japan, <sup>2</sup>Department of Cardiovascular Medicine, Shiga University of Medical Science, Shiga, Japan, <sup>3</sup>Saga-Ken Medical Center Koseikan, Saga, Japan*

### SP13-3 New Insights in Mapping and Ablation of AF: Relationship Between Ganglionated Plexi, Fractionated Atrial Potentials and Rotors in AF Patients

**Hiroshi Nakagawa**

*University of Oklahoma Health Sciences Center, USA*

### SP13-4 Rotors and the dynamics of atrial fibrillation in isolated sheep hearts

**Masatoshi Yamazaki<sup>1</sup>, Haruo Honjo<sup>1</sup>, Itsuo Kodama<sup>2</sup>, Kaichiro Kamiya<sup>1</sup>**

*<sup>1</sup>Research Institute of Environmental Medicine, Nagoya University, Aichi, Japan, <sup>2</sup>Nagoya University, Aichi, Japan*

### SP13-5 Localized Rotors and Focal Impulse Sources in the Left Atrium During Human Atrial Fibrillation: Phase Analysis from Contact Basket Catheter Electrograms

**Naoko Sasaki<sup>1</sup>, Yasuo Okumura<sup>1</sup>, Ichiro Watanabe<sup>1</sup>, Andrew Madry<sup>2</sup>, Yuki Hamano<sup>2</sup>, Koichi Nagashima<sup>1</sup>, Kazumasa Sonoda<sup>1</sup>, Rikitake Kogawa<sup>1</sup>, Keiko Takahashi<sup>1</sup>, Kazuki Iso<sup>1</sup>, Sayaka Kurokawa<sup>1</sup>, Kimie Ohkubo<sup>1</sup>, Toshiko Nakai<sup>1</sup>, Atsushi Hirayama<sup>1</sup>**

*<sup>1</sup>Division of Cardiology, Department of Medicine, Nihon University School of Medicine, Tokyo, Japan, <sup>2</sup>Cuoretech Pty Ltd, Australia*

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**SP13-6 Spatial relationship between the left atrial anatomical contact area and rotational activity in persistent AF**

Shiro Nakahara<sup>1</sup>, Yuichi Hori<sup>1</sup>, Naofumi Tsukada<sup>1</sup>, Ayako Nakagawa<sup>1</sup>, Yoshiko Sakai<sup>1</sup>, Isao Taguchi<sup>1</sup>, Takanori Yamaguchi<sup>2</sup>, Takeshi Tsuchiya<sup>2</sup>

<sup>1</sup>Department of Cardiology, Dokkyo Medical University Koshigaya Hospital, Saitama, Japan, <sup>2</sup>EP Expert Doctors-Team Tsuchiya, Kumamoto, Japan

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**SP13-7 High-Dominant Frequency Site Is a Surrogate of a Rotor in Atrial Fibrillation**

Koji Kumagai, Masahiro Nakano, Daisuke Kutsuzawa, Yoshiaki Yamaguchi, Kentaro Minami, Manabu Shimizu, Toshiaki Yano, Takehito Sasaki, Kohki Nakamura, Shigeto Naito, Shigeru Oshima

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

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**SP13-8 The Usefulness of Continuous Wavelet Transform Analysis Combined with Continuous Electrical Activity Analysis in Patients with Long-Standing Persistent Atrial Fibrillation**

Yasuhiro Yokoyama, Toru Adachi, Akira Kimata

Cardiology, St Lukes International Hospital, Tokyo, Japan



## Management for Frequent ICD Therapy

**Chairs** Takashi Kurita

*Division of Cardiovascular Center, Department of Internal Medicine, Kinki University, Osaka, Japan*

**Takeshi Mitsuhashi**

*Cardiovascular Medicine, Saitama Medical Center, Jichi Medical University, Saitama, Japan*

### PD6-1 Translational Perspective on Pathophysiology of Frequent ICD-shocked Ventricular Tachyarrhythmias

**Yukiomi Tsuji**, Daniel T. Harrel, Taisuke Ishikawa, Naomasa Makita

*Department of Molecular Physiology, Nagasaki University Graduate School of Biomedical Sciences, Nagasaki, Japan*

### PD6-2 Clinical predictors of electrical storm in German patients with implantable cardioverter defibrillator

**Yusuke Kondo**<sup>1</sup>, Markus Linhart<sup>1</sup>, Rene P. Andrie<sup>1</sup>, Marehiko Ueda<sup>2</sup>, Yoshio Kobayashi<sup>2</sup>, Joerg O. Schwab<sup>1</sup>

*<sup>1</sup>Department of Medicine-Cardiology, University of Bonn, Germany, <sup>2</sup>Department of Cardiology, Chiba University Graduate School of Medicine, Chiba, Japan*

### PD6-3 Electrical storm in the Japanese population—Analysis of Nippon Strom Study—

**Takashi Noda**<sup>1</sup>, Takashi Kurita<sup>2</sup>, Takashi Nitta<sup>3</sup>, Hiroshi Furushima<sup>4</sup>, Naoki Matsumoto<sup>5</sup>, Takeshi Toyoshima<sup>6</sup>, Akihiko Shimizu<sup>7</sup>, Hideo Mitamura<sup>8</sup>, Tohru Ohe<sup>9</sup>, Yoshifusa Aizawa<sup>10</sup>

*<sup>1</sup>Department of Cardiovascular Medicine, National Cerebral and Cardiovascular Center, Osaka, Japan, <sup>2</sup>Department of Medicine, Faculty of Medicine, Kinki University, Osaka, Japan, <sup>3</sup>Department of Cardiovascular Surgery, Nippon Medical School, Tokyo, Japan, <sup>4</sup>The First Department of Internal Medicine, Niigata University School of Medicine, Niigata, Japan, <sup>5</sup>Department of Pharmacology, St. Marianna University School of Medicine, Kanagawa, Japan, <sup>6</sup>Faculty of Health and Medical Care, Saitama Medical University, Saitama, Japan, <sup>7</sup>Faculty of Health Sciences, Yamaguchi University Graduate School of Medicine, Yamaguchi, Japan, <sup>8</sup>Tachikawa Hospital, Tokyo, Japan, <sup>9</sup>The Sakakibara Heart Institute of Okayama, Okayama, Japan, <sup>10</sup>Department of Research and Development, Tachikawa Medical Center, Niigata, Japan*

### PD6-4 Radiofrequency catheter ablation for electrical storm of ventricular tachycardia in structural heart disease

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

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

PD6-5

## The ablation procedure and prognosis in the patients with electrical storm according to the type of VT mechanism

Kazuhiro Satomi<sup>1</sup>, Muryo Terasawa<sup>1</sup>, Koji Miyamoto<sup>2</sup>, Takashi Noda<sup>2</sup>, Ikutaro Nakajima<sup>2</sup>, Shiro Kamakura<sup>2</sup>, Kengo Kusano<sup>2</sup>, Akira Yamashina<sup>1</sup>

<sup>1</sup>Department of Cardiology, Tokyo Medical University Hachioji Medical Center, Tokyo, Japan, <sup>2</sup>Department of Cardiovascular Medicine, National Cerebral and Cardiovascular Center, Osaka, Japan

# Friday, 31 July

**Room 1** 16:30-19:00 The 4th Anti-arrhythmic Therapy Summit [ATS]

## Total Management for Patients with Atrial Fibrillation

### Opening Remarks

**Youichi Kobayashi**

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

## Part 1

**Chairs Satoshi Ogawa**

*International University of Health and Welfare Mita Hospital, Tokyo, Japan*

**Kaoru Sugi**

*Division of Cardiovascular Medicine, Toho University Ohashi Medical Center, Tokyo, Japan*

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**ATS1 Management of hypertension in patients with atrial fibrillation**

**Mitsuru Ohishi**

*Department of Cardiovascular Medicine and Hypertension, Kagoshima University, Kagoshima, Japan*

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**ATS2 New therapeutic strategy is required to manage the patients with heart failure and atrial fibrillation**

**Hiroshi Ito**

*Department of Cardiovascular Medicine, Okayama University, Okayama, Japan*

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**ATS3 Management of older patients with atrial fibrillation: Geriatric point of view**

**Masahiro Akishita**

*Department of Geriatric Medicine, The University of Tokyo, Tokyo, Japan*

### Commentator

**Hideo Mitamura**

*Tachikawa Hospital, Tokyo, Japan*

## Part 2

**Chairs Hiroshi Inoue**

*Saiseikai Toyama Hospital, Toyama, Japan*

**Takeshi Yamashita**

*The Cardiovascular Institute, Tokyo, Japan*

**ATS4 Risk and Benefit of Anticoagulant and Antiplatelet Therapy in Patients with Atrial Fibrillation Undergoing Percutaneous Coronary Intervention**

Satoshi Shizuta, Kentaro Nakai, Tetsuma Kawaji, Takashi Yoshizawa, Hiroaki Sugiyama, Takeru Makiyama, Takeshi Kimura

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

**ATS5 Asymptomatic atrial fibrillation and risk of Thromboembolic events in patients implanted with pacemakers**

Toshiyuki Ishikawa

*Department of Cardio-renal Medicine, Yokohama City University School of Medicine, Kanagawa, Japan*

**ATS6 Antithrombotic therapy for atrial fibrillation in the era of Non-Vitamin K Antagonist Oral Anticoagulant (NOAC)**

Ken Okumura

*Department of Cardiology, Hirosaki University Graduate School of Medicine, Aomori, Japan*

**Closing Remarks**

Hirotsugu Atarashi

*Nippon Medical School Tama Nagayama Hospital, Tokyo, Japan*

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# Friday, 31 July

**Room 2** 8:30-10:00 Symposium14 [SP14]

## **Approach for ARVC (Genetics, Medical Therapy, Catheter Ablation) —From Bench to Bedside— ★**

**Chairs** Minoru Horie

*Department of Cardiovascular and Respiratory Medicine, Shiga University of Medical Science, Shiga, Japan*

**Akihiko Shimizu**

*Department of Medicine and Health Sciences, Yamaguchi University Graduate School of Medicine, Yamaguchi, Japan*

### **SP14-1 Key Note Lecture: Arrhythmogenic Right Ventricular Dysplasia: Three Decades of Progress?**

**Hugh Calkins**

*The Johns Hopkins University, USA*

### **SP14-2 Arrhythmogenic Right Ventricular Cardiomyopathy from the Genetic Basis to the Clinical Symptoms**

**Seiko Ohno<sup>1,2</sup>, Yuko Wada<sup>2</sup>, Keiko Sonoda<sup>2</sup>, Minoru Horie<sup>2</sup>**

*<sup>1</sup>Center for Epidemiologic Research in Asia, Shiga University of Medical Science, Shiga, Japan, <sup>2</sup>Cardiovascular Department, Shiga University of Medical Science, Shiga, Japan*

### **SP14-3 Pharmacological therapy in patients with arrhythmogenic right ventricular cardiomyopathy/dysplasia**

**Tsuyoshi Shiga, Noriko Kikuchi, Atsushi Suzuki, Nobuhisa Hagiwara**

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

### **SP14-4 Implantable Cardioverter Defibrillators in Arrhythmogenic Right Ventricular Cardiomyopathy**

**Toshiaki Sato**

*Cardiology, Second Department of Internal Medicine, Kyorin University School of Medicine, Tokyo, Japan*

### **SP14-5 Role of Catheter Ablation in Arrhythmogenic Right Ventricular Cardiomyopathy**

**Akihiko Nogami**

*Cardiovascular Division, Faculty of Medicine, University of Tsukuba, Ibaraki, Japan*

## Inherited Arrhythmias—Bench to Bedside ★

**Chairs** Minoru Horie

*Department of Cardiovascular and Respiratory Medicine, Shiga University of Medical Science, Shiga, Japan*

**Wataru Shimizu**

*Department of Cardiovascular Medicine, Graduate School of Medicine, Nippon Medical School, Tokyo, Japan*

### SP15-1 J wave syndromes: From bench to bedside

**Charles Antzelevitch**

*Lankenau Institute of Medical Research/SUNY Upstate Medical University, USA*

### SP15-2 Risk stratification of ventricular fibrillation in Brugada syndrome by combination of clinical non-invasive and molecular parameters

**Yukiko Nakano**<sup>1</sup>, Hidenori Ochi<sup>2</sup>, Hiroshi Kawazoe<sup>1</sup>, Takehito Tokuyama<sup>1</sup>, Yoshikazu Watanabe<sup>1</sup>, Hiroya Matsumura<sup>1</sup>, Shunsuke Tomomori<sup>1</sup>, Akinori Sairaku<sup>1</sup>, Hiroki Ikenaga<sup>1</sup>, Noboru Oda<sup>1</sup>, Nozomu Oda<sup>1</sup>, Yuko Uchimura-Makita<sup>1</sup>, Chikaaki Motoda<sup>1</sup>, Kazuaki Chayama<sup>3</sup>, Yasuki Kihara<sup>1</sup>

*<sup>1</sup>Department of Cardiovascular Medicine, Division of Frontier Medical Science, Programs for Biomedical Research Graduate School of Biomedical Science, Hiroshima University, Hiroshima, Japan, <sup>2</sup>Laboratory for Digestive Diseases, Center for Genomic Medicine, RIKEN, Hiroshima, Japan, <sup>3</sup>Department of Gastroenterology and Metabolism, Division of Frontier Medical Science, Programs for Biomedical Research Graduate School of Biomedical Science, Hiroshima University, Hiroshima, Japan*

### SP15-3 New risk stratification tool in patients with Brugada syndrome—Prognostic significance of pilsicainide-induced ventricular arrhythmias—

**Akira Ueoka**<sup>1</sup>, Hiroshi Morita<sup>2</sup>, Motoki Kubo<sup>1</sup>, Koji Nakagawa<sup>1</sup>, Nobuhiro Nishii<sup>1</sup>, Satoshi Nagase<sup>1</sup>, Hiroshi Ito<sup>1</sup>

*<sup>1</sup>Department of Cardiovascular Medicine, Okayama University Graduate School of Medicine and Dentistry, Okayama, Japan, <sup>2</sup>Department of Cardiovascular Therapeutics, Okayama University Graduate School of Medicine and Dentistry, Okayama, Japan*

### SP15-4 The risk of sudden cardiac death in patients with spontaneous and induced Brugada phenotype

**Yoshino Minoura**, Yuya Nakamura, Kou Ogawa, Koichiro Inokuchi, Akinori Ochi, Yuta Chiba, Yoshimi Onishi, Shiro Kawasaki, Yumi Munetsugu, Miwa Kikuchi, Tatsuya Onuki, Norikazu Watanabe, Taro Adachi, Mitsuharu Kawamura, Taku Asano, Kaoru Tanno, Youichi Kobayashi

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

## **SP15-5 Comparison of circadian, weekly and seasonal variations between electrical storms versus single VF events in patients with Brugada syndrome**

**Yoshiyasu Aizawa**<sup>1</sup>, Seiji Takatsuki<sup>1</sup>, Kazuaki Nakajima<sup>1</sup>, Shin Kashimura<sup>1</sup>, Akira Kunitomi<sup>1</sup>, Yoshinori Katsumata<sup>1</sup>, Takahiko Nishiyama<sup>1</sup>, Takehiro Kimura<sup>1</sup>, Nobuhiro Nishiyama<sup>1</sup>, Kotaro Fukumoto<sup>1</sup>, Yoko Tanimoto<sup>1</sup>, Yoshiaki Kaneko<sup>2</sup>, Shinichi Niwano<sup>3</sup>, Takashi Kurita<sup>4</sup>, Takeshi Mitsuhashi<sup>5</sup>, Takashi Noda<sup>6</sup>, Shiro Kamakura<sup>6</sup>, Akihiko Shimizu<sup>7</sup>, Minoru Horie<sup>8</sup>, Yoshifusa Aizawa<sup>9</sup>, Keiichi Fukuda<sup>1</sup>

<sup>1</sup>Department of Cardiology, Keio University School of Medicine, Tokyo, Japan, <sup>2</sup>Gunma University, Gunma, Japan, <sup>3</sup>Kitasato University, Kanagawa, Japan, <sup>4</sup>Kinki University, Osaka, Japan, <sup>5</sup>Saitama Medical Center, Jichi Medical University, Saitama, Japan, <sup>6</sup>National Cerebral and Cardiovascular Center, Osaka, Japan, <sup>7</sup>Yamaguchi University, Yamaguchi, Japan, <sup>8</sup>Shiga University, Shiga, Japan, <sup>9</sup>Tachikawa Medical Center, Niigata, Japan

## **SP15-6 Drug challenge test and genetic test for the diagnosis and management of inherited primary arrhythmia syndromes**

**Takeshi Ueyama**<sup>1</sup>, Akihiko Shimizu<sup>2</sup>, Yasuhiro Yoshiga<sup>1</sup>, Makoto Ono<sup>1</sup>, Takayoshi Kato<sup>1</sup>, Tomoko Fumimoto<sup>1</sup>, Hironori Ishiguchi<sup>1</sup>, Seiko Ohno<sup>3</sup>, Takeru Makiyama<sup>4</sup>, Minoru Horie<sup>4</sup>, Masafumi Yano<sup>1</sup>

<sup>1</sup>Department of Medicine and Clinical Science, Yamaguchi University Graduate School of Medicine, Yamaguchi, Japan, <sup>2</sup>Faculty of Health Sciences, Yamaguchi Graduate School of Medicine, Yamaguchi, Japan, <sup>3</sup>Department of Cardiovascular and Respiratory Medicine, Shiga University of Medical Science, Shiga, Japan, <sup>4</sup>Department of Cardiovascular Medicine, Graduate School of Medicine, Kyoto University, Kyoto, Japan

## Regenerative Medicine and Arrhythmia

**Chairs** Yuji Murakawa

*Department of Internal Medicine, Teikyo University Mizonouchi Hospital, Kanagawa, Japan*

Keiichi Fukuda

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

### SP16-1 Arrhythmogenic disease modeling by iPS cells

Shinsuke Yuasa

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

### SP16-2 Study of long QT syndrome type 3 using human iPS cell-derived cardiomyocytes

Tetsushi Furukawa<sup>1</sup>, Shinichiro Okata<sup>1,2</sup>, Shinsuke Yuasa<sup>2</sup>, Tomoyuki Suzuki<sup>2,3</sup>, Naomasa Makita<sup>4</sup>, Junko Kurokawa<sup>1</sup>, Toru Egashira<sup>2</sup>, Hiroyuki Yamakawa<sup>2</sup>, Tomohisa Seki<sup>2</sup>, Yoshiyasu Aizawa<sup>2</sup>, Hisayuki Hashimoto<sup>2</sup>, Yusuke Kuroda<sup>1,3</sup>, Atsushi Tanaka<sup>2</sup>, Kojiro Yae<sup>2</sup>, Mitsushige Murata<sup>2</sup>, Takeshi Aiba<sup>5</sup>, Wataru Shimizu<sup>6</sup>, Minoru Horie<sup>7</sup>, Kaichiro Kamiya<sup>3</sup>, Keiichi Fukuda<sup>2</sup>

*<sup>1</sup>Department of Bio-informational Pharmacology, Medical Research Institute, Tokyo Medical and Dental University, Tokyo, Japan, <sup>2</sup>Department of Cardiology, School of Medicine, Keio University, Tokyo, Japan, <sup>3</sup>Department of Cardiovascular Research, Research Institute of Environmental Medicine, Nagoya University, Aichi, Japan, <sup>4</sup>Department of Molecular Pathophysiology-1, Graduate School of Biomedical Sciences, Nagasaki University, Nagasaki, Japan, <sup>5</sup>Division of Arrhythmia and Electrophysiology, Department of Cardiovascular Medicine, National Cerebral and Cardiovascular Center, Osaka, Japan, <sup>6</sup>Department of Cardiovascular Medicine, Nippon Medical School, Tokyo, Japan, <sup>7</sup>Department of Cardiovascular Medicine, Shiga University of Medical Science, Shiga, Japan*

### SP16-3 Recent progress in pathophysiology of hypertrophic cardiomyopathy using iPS cells

Atsushi Tanaka<sup>1</sup>, Shinsuke Yuasa<sup>2</sup>, Koichi Node<sup>1</sup>, Keiichi Fukuda<sup>2</sup>

*<sup>1</sup>Department of Cardiovascular Medicine, Saga University, Saga, Japan, <sup>2</sup>Department of Cardiology, Keio University School of Medicine, Tokyo, Japan*

### SP16-4 Preclinical transplantation study for pluripotent stem cell-derived cardiomyocytes in non-human primates: Assessment of electrophysiological and contractile functions

Yuji Shiba

*Department of Cardiovascular Medicine, Institute for Biomedical Science, Shinshu University, Nagano, Japan*



# Friday, 31 July

## **SP16-5 Can computer simulation technique contribute regenerative medicine?**

**Shin Inada**<sup>1</sup>, Daniel T. Harrell<sup>2</sup>, Ryo Haraguchi<sup>1</sup>, Takashi Ashihara<sup>3</sup>, Takeshi Aiba<sup>1</sup>, Takanori Ikeda<sup>4</sup>, Kazuyuki Mitsui<sup>5</sup>, Haruo Honjo<sup>6</sup>, Nitaro Shibata<sup>7</sup>, Naomasa Makita<sup>2</sup>, Kaichiro Kamiya<sup>6</sup>, Itsuo Kodama<sup>6</sup>, Kazuo Nakazawa<sup>1</sup>

<sup>1</sup>National Cerebral and Cardiovascular Center, Osaka, Japan, <sup>2</sup>Department of Molecular Physiology, Nagasaki University, Nagasaki, Japan, <sup>3</sup>Department of Cardiovascular Medicine, Shiga University of Medical Science, Shiga, Japan, <sup>4</sup>Toho University Faculty of Medicine, Tokyo, Japan, <sup>5</sup>Graduate School of Advanced Science and Technology, Tokyo Denki University, Tokyo, Japan, <sup>6</sup>Research Institute of Environmental Medicine, Nagoya University, Aichi, Japan, <sup>7</sup>Shinjuku Mitsui Building Clinic, Tokyo, Japan

## New development on the mechanism of atrial fibrillation

**Chairs Nobuhisa Hagiwara**

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

**Naohiko Takahashi**

*Department of Cardiology and Clinical Examination, Faculty of Medicine, Oita University, Oita, Japan*

### SP17-1 Atrial fibrillation and arrhythmogenic activities of pulmonary vein cardiomyocytes

**Kyoichi Ono<sup>1</sup>, Yosuke Okamoto<sup>2</sup>, Shohei Umehara<sup>3</sup>, Takeshi Adachi<sup>1</sup>, Takayoshi Ohba<sup>1</sup>, Akira Amano<sup>3</sup>, Makoto Takano<sup>4</sup>**

*<sup>1</sup>The Department of Cell Physiology, Akita University Graduate School of Medicine, Akita, Japan, <sup>2</sup>The Department of Pharmacology, Hirosaki University School of Medicine, Aomori, Japan, <sup>3</sup>The Faculty of Bioinformatics, Ritsumeikan University, Shiga, Japan, <sup>4</sup>The Department of Physiology, Kurume University School of Medicine, Fukuoka, Japan.*

### SP17-2 MicroRNA Regulation and Atrial Remodeling: Role in Atrial Fibrillation Pathophysiology and Therapeutic Potential

**Masahide Harada**

*Department of Cardiology, Fujita Health University School of Medicine, Aichi, Japan*

### SP17-3 Inflammatory network underlying the pathogenesis of atrial fibrillation

**Hiroshi Akazawa**

*Department of Cardiovascular Medicine, Graduate School of Medicine, The University of Tokyo, Tokyo, Japan*

### SP17-4 Autonomic Nervous System and Atrial Fibrillation

**Naohiko Takahashi, Mikiko Nakagawa, Tetsuji Shinohara**

*The Department of Cardiology and Clinical Examination, Oita University, Oita, Japan*

### SP17-5 How rotor is related to substrate in human atrial fibrillation (AF)

**Takeshi Tsuchiya<sup>1</sup>, Takashi Ashihara<sup>2</sup>, Takanori Yamaguchi<sup>1,4</sup>, Shiro Nakahara<sup>3</sup>, Akira Fukui<sup>1</sup>**

*<sup>1</sup>EP Expert Doctors-Team Tsuchiya, Kumamoto, Japan, <sup>2</sup>Department of Cardiovascular Medicine, Shiga University of Medical Science, Shiga, Japan, <sup>3</sup>Dokkyo Medical University Koshigaya Hospital, Department of Cardiology, Saitama, Japan, <sup>4</sup>Saga-Ken Medical Centre, Koseikan, Saga, Japan*

# Friday, 31 July

**Room 2** 16:30-19:00 Satellite Symposium [SS]

## Part 1 Forefront of the Catheter Ablation Therapy

**Chairs** Kenzo Hirao

*Tokyo Medical and Dental University, Heart Rhythm Center, Tokyo, Japan*

**Kengo Kusano**

*Cardiovascular Medicine, National Cerebral and Cardiovascular Center, Osaka, Japan*

### SS1-1 Ethanol Infusion into Cardiac Veins for the Cure of Arrhythmias

**Kaoru Okishige<sup>1</sup>, Hideshi Aoyagi<sup>1</sup>, Naohiko Kawaguchi<sup>1</sup>, Tomofumi Nakamura<sup>1</sup>, Mitsumi Yamashita<sup>1</sup>, Nobutaka Katoh<sup>1</sup>, Yasuteru Yamauchi<sup>1</sup>, Tetsuo Sasano<sup>2</sup>, Kenzo Hirao<sup>2</sup>**

*<sup>1</sup>Heart Center, Yokohama-City Bay Red Cross Hospital, Kanagawa, Japan, <sup>2</sup>Arrhythmia Center, Tokyo Medical and Dental University, Tokyo, Japan*

### SS1-2 Catheter ablation for inherited arrhythmias

**Yukio Sekiguchi**

*Cardiovascular Division, Faculty of Medicine, University of Tsukuba, Ibaraki, Japan*

## Part 2 How to apply AF detecting function of implanting devices for the patient management

**Chairs** Haruhiko Abe

*Department of Heart Rhythm Management, University of Occupational and Environmental Health, Fukuoka, Japan*

**Yuji Nakazato**

*Department of Cardiology, Juntendo University Urayasu Hospital, Chiba, Japan*

### SS2-1 The Reliability of Atrial Fibrillation Detection by Cardiac Implantable Electronic Devices

**Takashi Tokano**

*Department of Cardiology, Juntendo University Urayasu Hospital, Chiba, Japan*

### SS2-2 How should we deal with asymptomatic atrial fibrillation in device implanted patients?

**Takeshi Mitsuhashi, Yoshitaka Sugawara, Shin-ichi Momomura**

*Cardiovascular Medicine, Saitama Medical Center, Jichi Medical University, Saitama, Japan*

### SS2-3 Device settings for detecting true atrial tachyarrhythmias and algorithms for preventing atrial tachyarrhythmias

**Ritsuko Kohno, Haruhiko Abe**

*Department of Heart Rhythm Management, University of Occupational and Environmental Health, Fukuoka, Japan*

**SS2-4**

**Atrial tachyarrhythmia monitoring to guide anticoagulation in patients with cardiovascular implantable electronic devices**

**Eiichi Watanabe, Kentaro Okuda, Yukio Ozaki**

*Department of Cardiology, Fujita Health University, School of Medicine, Aichi, Japan*

# Friday, 31 July

**Room 3** 7:45-8:30 Morning Seminar2 [MS2]

## Sleep Apnea, Arrhythmias and Sudden Death ★

**Chair** Taro Adachi

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

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**MS2-1** Sleep Apnea, Arrhythmias and Sudden Death

**Virend K. Somers**

*Mayo Clinic, USA*

*(Teijin Home Healthcare Limited)*

## Strategy to Prevent Stroke for Atrial Fibrillation—From Bench to Bedside—

**Chairs Hiroshi Inoue**

*Saiseikai Toyama Hospital, Toyama, Japan*

**Kaoru Sugi**

*Division of Cardiovascular Medicine, Toho University Ohashi Medical Center, Tokyo, Japan*

### PD7-1 Approach to atrial fibrillation with hemostatic markers

**Hidesaku Asakura**

*The Third Department of Internal Medicine, University of Kanazawa, Ishikawa, Japan*

### PD7-2 Consideration of the suitable warfarin control in Japanese from the base of coagulant and fibrinolytic markers

**Youichi Kobayashi**, Akinori Ochi, Koichiro Inokuchi, Yuya Nakamura, Koh Ogawa, Yuta Chiba, Yoshimi Onishi, Yumi Munetsugu, Tatsuya Onuki, Yoshino Minoura, Norikazu Watanabe, Taro Adachi, Taku Asano

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

### PD7-3 Important Lessons from the three J-RHYTHM studies

**Yuji Okuyama**

*Advanced Cardiovascular Therapeutics, University of Osaka, Osaka, Japan*

### PD7-4 Guideline-discordant use of oral anticoagulants for atrial fibrillation patients and its outcomes: Lessons from the Fushimi AF Registry

**Masaharu Akao**

*Department of Cardiology, National Hospital Organization Kyoto Medical Center, Kyoto, Japan*

### PD7-5 Up-to-date Information on Non-vitamin K Antagonist Oral Anticoagulants

**Takeshi Yamashita**

*The Department of Cardiovascular Medicine, The Cardiovascular Institute, Tokyo, Japan*

# Friday, 31 July

**Room 3** 10:00-11:30 Panel Discussion8 [PD8]

## Strategy of Anti-coagulant Therapy with Anti-platelet Therapy in the Patients with Atrial Fibrillation and Ischemic Heart Disease ★

**Chairs** Takao Kato

*International University of Health and Welfare Mita Hospital, Tokyo, Japan*

**Youichi Kobayashi**

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

### **PD8-1** Strategy of Anti-coagulant Therapy in the Patients with afib ablation

**Riccardo Cappato**

*Humanitas Gavazzeni, Bergamo and Istituto Clinico Humanitas, Italy*

### **PD8-2** Prevention of coronary event in patients with CAD and AF

**Hiroshi Ito**

*Department of Cardiovascular Medicine, Okayama University, Okayama, Japan*

### **PD8-3** Anticoagulant and Antiplatelet Therapy in Real World Patients with Atrial Fibrillation Undergoing Percutaneous Coronary Intervention: From the CREDO-Kyoto Registry Cohort-2

**Satoshi Shizuta, Koji Goto, Kentaro Nakai, Takeshi Kimura**

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

### **PD8-4** Current Status of Anti-thrombotic Therapy in Atrial Fibrillation Ablation Patients with Coronary Artery Disease

**Koichi Inoue<sup>1</sup>, Yuji Murakawa<sup>2</sup>, Akihiko Nogami<sup>3</sup>, Morio Shoda<sup>4</sup>, Shigeto Naito<sup>5</sup>, Koichiro Kumagai<sup>6</sup>, Yasushi Miyauchi<sup>7</sup>, Teiichi Yamane<sup>8</sup>, Norishige Morita<sup>9</sup>, Ken Okumura<sup>10</sup>**

*<sup>1</sup>Cardiovascular Center, Sakurabashi Watanabe Hospital, Osaka, Japan, <sup>2</sup>Fourth Department of Internal Medicine, Teikyo University, Tokyo, Japan, <sup>3</sup>Cardiovascular Division, Faculty of Medicine, University of Tsukuba, Ibaraki, Japan,, <sup>4</sup>Department of Cardiology, Tokyo Women's Medical University, Tokyo, Japan, <sup>5</sup>Division of Cardiology, Gunma Prefectural Cardiovascular Center, Gunma, Japan, <sup>6</sup>Heart Rhythm Center, Fukuoka Sanno Hospital, Fukuoka, Japan, <sup>7</sup>Division of Cardiology, Nihon Medical School, Tokyo, Japan, <sup>8</sup>The Department of Cardiology, The Jikei University School of Medicine, Tokyo, Japan, <sup>9</sup>Division of Cardiology, Department of Medicine, Tokai University Hachioji Hospital, Tokyo, Japan, <sup>10</sup>Division of Cardiology, Hirosaki University Graduate School of Medicine, Aomori, Japan*

**Room 3** 11:50-12:50 Luncheon Seminar26 [LS26]

## Practical Applicability of $\beta$ -blockers for Atrial and Ventricular Tachyarrhythmias

**Chair** Kazutaka Aonuma

*Cardiovascular Division, Graduate School of Comprehensive Human Sciences, University of Tsukuba, Ibaraki, Japan*

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**LS26-1** Practical Applicability of  $\beta$ -blockers for Atrial and Ventricular Tachyarrhythmias

**Takeshi Aiba**

*Department of Cardiovascular Medicine, National Cerebral and Cardiovascular Center, Osaka, Japan*

*(ONO PHARMACEUTICAL CO., LTD.)*



# Friday, 31 July

Room 3 13:00-14:00 Debate (Medical Professionals) 3 [MD3]

## DDDペースメーカーはVVIペースメーカーに勝る

座長 船崎俊一  
済生会川口総合病院

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### MD3-1 賛成

大木康則  
埼玉医科大学総合医療センターMEサービス部

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### MD3-2 反対

井野裕也  
京都桂病院臨床工学科

## アブレーション3 (メディカルプロフェッショナル)

座長 本田俊弘

済生会熊本病院心臓血管センター 循環器内科

菊地美和

昭和大学医学部内科学講座 循環器内科学部門

### M5-1 Visitag® module を用いたContact Force Integral Guided Pulmonary Vein Isolationの有効性に関する検討

西尾佳恵<sup>1</sup>, 杉山千紘<sup>1</sup>, 松井孝拓<sup>1</sup>, 永嶋孝一<sup>2</sup>, 奥村恭男<sup>2</sup>, 園田和正<sup>2</sup>, 古川力丈<sup>2</sup>, 佐々木直子<sup>2</sup>, 磯一貴<sup>2</sup>, 高橋啓子<sup>2</sup>, 黒川早矢香<sup>2</sup>, 大久保公恵<sup>2</sup>, 中井俊子<sup>2</sup>, 渡辺一郎<sup>2</sup>, 平山篤志<sup>2</sup>

<sup>1</sup>日本大学医学部附属板橋病院臨床工学技士室, <sup>2</sup>日本大学医学部内科学系循環器内科学分野

### M5-2 心房細動アブレーションにおけるVISITAGモジュールの有用性の検討

渡邊哲広<sup>1</sup>, 中原志朗<sup>2</sup>, 堀裕一<sup>2</sup>, 塚田直史<sup>2</sup>

<sup>1</sup>獨協医科大学越谷病院臨床工学部, <sup>2</sup>獨協医科大学越谷病院循環器内科

### M5-3 CARTO3システムVISITAGモジュールを用いた操作者のポイント取得精度についての検討

徳留大剛<sup>1</sup>, 寺田直正<sup>1</sup>, 佐々木健<sup>1</sup>, 伊藤浩一<sup>1</sup>, 田代嗣晴<sup>1</sup>, 近藤幸夫<sup>1</sup>, 安藤敬<sup>1</sup>, 小松雄樹<sup>2</sup>, 小和瀬晋弥<sup>2</sup>, 黒崎健司<sup>2</sup>

<sup>1</sup>独立行政法人労働者健康福祉機構横浜労災病院臨床工学部, <sup>2</sup>独立行政法人労働者健康福祉機構横浜労災病院循環器内科

### M5-4 心房細動アブレーション中における経口抗凝固薬のActivated Clotting Timeへの影響

黒田敬<sup>1</sup>, 貴島秀行<sup>2</sup>, 駒井るみ<sup>3</sup>, 蘆田健毅<sup>2</sup>, 峰隆直<sup>2</sup>, 増山理<sup>2</sup>

<sup>1</sup>兵庫医科大学病院臨床工学室, <sup>2</sup>兵庫医科大学病院循環器内科, <sup>3</sup>兵庫医科大学病院看護部

### M5-5 心房細動を合併した僧帽弁閉鎖不全症の心臓血管外科手術時に一期的に全リード心外膜側留置によるCRT-D植込術と術後CRT-DでAF治療を試みた一例

塚本毅<sup>1</sup>, 伊藤敦彦<sup>2</sup>, 笠原勝彦<sup>3</sup>, 富澤光昭<sup>1</sup>, 山下尋史<sup>2</sup>, 野崎彰<sup>2</sup>

<sup>1</sup>公立学校共済組合関東中央病院医療機器管理室, <sup>2</sup>公立学校共済組合関東中央病院循環器内科, <sup>3</sup>公立学校共済組合関東中央病院心臓血管外科

## アブレーション4 (メディカルプロフェッショナル)

座長 小林建三郎

東邦大学医療センター大森病院 循環器内科

進藤勇人

JA秋田厚生連平鹿総合病院 臨床工学科

### M6-1 高周波心房中隔穿刺システムによる気泡発生についての実験的検討

堀口敦史<sup>1</sup>, 新保里佳<sup>1</sup>, 谷口翔太<sup>1</sup>, 中島基裕<sup>1</sup>, 伊藤さやか<sup>1</sup>, 樋口知之<sup>1</sup>, 春田良雄<sup>1</sup>, 長内宏之<sup>2</sup>

<sup>1</sup>公立陶生病院臨床工学科, <sup>2</sup>公立陶生病院循環器内科

### M6-2 心房細動に対するMarshall静脈内化学的アブレーション後の経時的変化—高速フーリエ変換を用いた周波数解析—

柴田典寿<sup>1</sup>, 加藤千雄<sup>2</sup>, 亀谷良介<sup>2</sup>, 田中昭光<sup>2</sup>, 下郷卓史<sup>2</sup>, 菅原周史<sup>1</sup>, 横井利浩<sup>1</sup>, 和田英喜<sup>1</sup>

<sup>1</sup>名古屋徳洲会総合病院臨床工学科, <sup>2</sup>名古屋徳洲会総合病院循環器内科

### M6-3 Double Contact Forceを用いたBipolar Ablationにおける水槽実験の検討

那須敏裕<sup>1</sup>, 田村隆始<sup>2</sup>, 桑原洋平<sup>2</sup>, 山内貴司<sup>2</sup>, 鈴木 学<sup>2</sup>, 菅原誠一<sup>2</sup>, 渡部 悟<sup>2</sup>, 千葉二三夫<sup>2</sup>, 廣上 貢<sup>3</sup>, 宮本憲次郎<sup>4</sup>, 西澤弘泰<sup>5</sup>, 田口憲博<sup>5</sup>

<sup>1</sup>市立札幌病院臨床工学科, <sup>2</sup>手稲溪仁会病院臨床工学科, <sup>3</sup>手稲溪仁会病院循環器内科, <sup>4</sup>札幌心臓血管クリニックハートリズムセンター, <sup>5</sup>平和物産株式会社

### M6-4 当院における先天性心疾患の頻拍性不整脈に対する心臓電気生理検査及びカテーテルアブレーション時のヒス束電位記録の現状

熊丸隆司<sup>1</sup>, 豊原啓子<sup>2</sup>, 坂本健太郎<sup>1</sup>, 小林潤平<sup>1</sup>, 竹内大二<sup>2</sup>, 西村智美<sup>2</sup>, 宮本健志<sup>2</sup>, 工藤恵道<sup>2</sup>, 和田 励<sup>2</sup>, 庄田守男<sup>3</sup>

<sup>1</sup>東京女子医科大学病院臨床工学科, <sup>2</sup>東京女子医科大学循環器小児科, <sup>3</sup>東京女子医科大学循環器内科

### M6-5 高周波カテーテルアブレーションを受ける患者の不安及び看護に対する要望への検討

野中寛子<sup>1</sup>, 押川宜且<sup>1</sup>, 甲斐克彦<sup>1</sup>, 池田スエ子<sup>1</sup>, 足利敬一<sup>2</sup>, 柴田剛徳<sup>2</sup>

<sup>1</sup>宮崎市郡医師会病院看護科, <sup>2</sup>宮崎市郡医師会病院循環器内科

### M6-6 脳梗塞のリハビリテーション期における心房細動の意義

栗和田直樹<sup>1</sup>, 安斎結子<sup>1</sup>, 須藤彩子<sup>1</sup>, 中村和美<sup>1</sup>, 相澤義房<sup>2</sup>

<sup>1</sup>悠遊健康村病院・リハビリセンター看護部, <sup>2</sup>立川メディカルセンター研究開発部

**Room 4** 7:45-8:30 Morning Seminar3 [MS3]

## **Enhancing the Diagnosis of Complex Arrhythmias with Innovative 3D Mapping Technologies ★**

**Chair** **Kaoru Okishige**

*Heart Center, Yokohama-City Bay Red Cross Hospital, Kanagawa, Japan*

**MS3** **Enhancing the Diagnosis of Complex Arrhythmias with Innovative 3D Mapping Technologies**

**Young-Hoon Kim**

*Korea University Medical Center, Korea*

*(St. Jude Medical Japan Co., Ltd.)*

## Current Status and Issues of Device-therapy for Pediatric Patients

**Chairs Toshio Nakanishi**

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

**Shigeru Tateno**

*Department of Pediatrics, Chiba Cerebral and Cardiovascular Center, Chiba, Japan*

### SP18-1 How to prevent sudden death in children and adolescent

**Naokata Sumitomo**

*Department of Pediatric Cardiology, Saitama Medical University, International Medical Center, Saitama, Japan*

### SP18-2 Impact of AED on the outcome of out-of-hospital cardiac arrest in school-age children: From Utstein registry and a nationwide survey

**Yoshihide Mitani<sup>1</sup>, Kunio Ohta<sup>2</sup>, Naokata Sumitomo<sup>3</sup>**

*<sup>1</sup>Department of Pediatrics, Mie University Graduate School of Medicine, Mie, Japan, <sup>2</sup>Department of Pediatrics, Kanazawa University Graduate School of Medicine, Ishikawa, Japan, <sup>3</sup>Department of Pediatric Cardiology, Saitama International Medical Center, Saitama, Japan*

### SP18-3 Implantable cardioverter defibrillator therapy in patients with congenital heart disease

**Keiko Toyohara<sup>1</sup>, Tetsuyuki Manaka<sup>2</sup>, Morio Shoda<sup>2</sup>**

*<sup>1</sup>The Department of Pediatric Cardiology, Tokyo Woman's Medical University, Tokyo, Japan, <sup>2</sup>The Department of Cardiology, Tokyo Women's Medical University, Tokyo, Japan*

### SP18-4 Optimal pacing sites for cardiac resynchronization therapy for patients with a systemic right ventricle with or without a rudimentary left ventricle

**Aya Miyazaki<sup>1</sup>, Heima Sakaguchi<sup>1</sup>, Koji Kagisaki<sup>2</sup>, Nobuyuki Tsujii<sup>1</sup>, Michio Matsuoka<sup>1</sup>, Tetsuya Yamamoto<sup>1</sup>, Takaya Hoashi<sup>2</sup>, Takashi Noda<sup>3</sup>, Hideo Ohuchi<sup>1</sup>**

*<sup>1</sup>Department of Pediatric Cardiology, National Cerebral and Cardiovascular Center, Osaka, Japan, <sup>2</sup>Department of Pediatric Cardiovascular Surgery, National Cerebral and Cardiovascular Center, Osaka, Japan, <sup>3</sup>Division of Arrhythmias and Electrophysiology, Department of Cardiovascular Medicine, National Cerebral and Cardiovascular Center, Osaka, Japan*

### SP18-5 Antitachycardia pacing therapy after repair of complex congenital heart disease: A single center experience

**Fumie Takechi, Shigeru Tateno, Hiroko Morishima, Yasutaka Kawasoe, Yoshitomo Okajima**

*Department of Pediatrics, Chiba Cerebral and Cardiovascular Center, Chiba, Japan*

## Catheter Ablation for Arrhythmias in Adult Congenital Heart Disease

**Chairs** Yoshihide Nakamura

*Department of Pediatrics, Kinki University Faculty of Medicine, Osaka, Japan*

**Morio Shoda**

*Department of Cardiovascular Medicine, Tokyo Women's Medical University, Tokyo, Japan*

### SP19-1 Catheter ablation in patients with WPW syndrome/AVNRT concomitant with congenital heart diseases

**Satoru Takeno, Yoshihide Nakamura**

*Department of Pediatrics, Faculty of Medicine, Kinki University, Osaka, Japan*

### SP19-2 Radiofrequency catheter ablation of ventricular tachycardias in adult patients with congenital heart disease

**Takashi Noda<sup>1</sup>, Koji Miyamoto<sup>1</sup>, Aya Miyazaki<sup>2</sup>, Heima Sakaguchi<sup>2</sup>, Mitsuru Wada<sup>1</sup>, Ikutaro Nakajima<sup>1</sup>, Kohei Ishibashi<sup>1</sup>, Takeshi Aiba<sup>1</sup>, Shiro Kamakura<sup>1</sup>, Kazuhiro Satomi<sup>3</sup>, Kengo Kusano<sup>1</sup>**

*<sup>1</sup>Division of Arrhythmia and Electrophysiology, Department of Cardiovascular Medicine, National Cerebral and Cardiovascular Center, Osaka, Japan, <sup>2</sup>Department of Pediatric Cardiology, National Cerebral and Cardiovascular Center, Osaka, Japan, <sup>3</sup>Department of Cardiovascular Medicine, Tokyo Medical University Hachioji Medical Center, Tokyo, Japan*

### SP19-3 Radiofrequency catheter ablation of atrial tachycardia after an atrial switch operation

**Tsugutoshi Suzuki**

*Department of Pediatric Electrophysiology, Pediatric Medical Care Center, Osaka City General Hospital, Pediatric Electrophysiology, Osaka, Japan*

### SP19-4 Catheter Ablation for Supraventricular Tachycardia after Fontan Surgery

**Akihiko Nogami**

*Cardiology Division, Faculty of Medicine, University of Tsukuba, Ibaraki, Japan*

### SP19-5 Catheter ablation of atrioventricular reentrant tachycardia involving twin atrioventricular noddes in patients with congenital heart disease

**Keiko Toyohara, Morio Shoda**

*The Department of Pediatric Cardiology, Tokyo Woman's Medical University, Tokyo, Japan*

*Friday, 31 July*

**Room 4** 11:50-12:50 Luncheon Seminar27 [LS27]

## **Improving the Efficacy of CRT Implants and Outcomes with SJM Quadra and MediGuide Technologies ★**

**Chair** **Kyoko Soejima**

*Department of Cardiology, Kyorin University, Tokyo, Japan*

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**LS27-1** **Improving the Efficacy of CRT Implants and Outcomes with SJM Quadra and MediGuide Technologies**

**Bernard Thibault**

*Montreal Heart Institute, Canada*

*(St. Jude Medical Japan Co., Ltd.)*

## Update of Genetics in Inherited Arrhythmia Syndromes ★

**Chairs** Young-Hoon Kim

*Korea University Anam Hospital, Korea*

**Minoru Horie**

*Department of Cardiovascular and Respiratory Medicine, Shiga University of Medical Science, Shiga, Japan*

**Wataru Shimizu**

*Department of Cardiovascular Medicine, Graduate School of Medicine, Nippon Medical School, Tokyo, Japan*

### JJA1 Lamin A/C-related cardiomyopathy—From Bench to Bedside—

**Takeru Makiyama**<sup>1</sup>, Suguru Nishiuchi<sup>1</sup>, Hirohiko Kohjitani<sup>1</sup>, Seiko Ohno<sup>2</sup>, Minoru Horie<sup>2</sup>, Takeshi Kimura<sup>1</sup>

<sup>1</sup>Department of Cardiovascular Medicine, Kyoto University Graduate School of Medicine, Kyoto, Japan, <sup>2</sup>Department of Cardiovascular and Respiratory Medicine, Shiga University of Medical Science, Shiga, Japan

### JJA2 Clinical manifestation in early repolarization syndrome

**Gi-Byoung Nam**

*Asan Medical Center, Korea*

### JJA3 Genetic screening for Brugada syndrome and Early Repolarization Syndrome

**Jimmy JM Juang**

*National Taiwan University Hospital, Taiwan*

### JJA4 A novel KCNJ3 mutation as a susceptibility for ventricular arrhythmias in long-QT Syndrome

**Takeshi Aiba**<sup>1</sup>, Mayuko Ono<sup>2</sup>, Futoshi Toyoda<sup>2</sup>, Junichiro Miake<sup>5</sup>, Satoko Hagiwara<sup>6</sup>, Toru Shinohara<sup>7</sup>, Kohei Ishibashi<sup>1</sup>, Mitsuru Wada<sup>1</sup>, Ikutaro Nakajima<sup>1</sup>, Koji Miyamoto<sup>1</sup>, Hideo Okamura<sup>1</sup>, Takashi Noda<sup>1</sup>, Shiro Kamakura<sup>1</sup>, Kengo Kusano<sup>1</sup>, Akihiko Sekine<sup>1</sup>, Toshihiro Tanaka<sup>3</sup>, Yoshihiro Miyamoto<sup>1</sup>, Hiroshi Matsuura<sup>2</sup>, Minoru Horie<sup>2</sup>, Wataru Shimizu<sup>4</sup>

<sup>1</sup>Department of Cardiovascular Medicine, National Cerebral and Cardiovascular Center, Osaka, Japan, <sup>2</sup>Shiga University of Medical Sciences, Shiga, Japan, <sup>3</sup>Tokyo Medical and Dental University, Tokyo, Japan, <sup>4</sup>Nippon Medical School, Tokyo, Japan, <sup>5</sup>Tottori University, Tottori, Japan, <sup>6</sup>Kanagawa Children's Medical Center, Kanagawa, Japan, <sup>7</sup>Kinki University, Osaka, Japan



# Friday, 31 July

**Room 4** 15:00-16:00 Sweets Seminar4 [TS4]

## The meanings of ventricular late potential during sleep hours

**Chair** Youichi Kobayashi

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

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**TS4-1** The meanings of ventricular late potential during sleep hours

**Koichiro Yoshioka**

*Tokai University School of Medicine, Cardiology, Kanagawa, Japan*

*(JCT Company, Limited, Hiroshima, Japan)*

## SVT 2

**Chairs** Shin Inoue

*Department of Internal Medicine, Showa University Dental Hospital, Tokyo, Japan*

**Tetsuo Yagi**

*Division of Cardiology, Sendai City Hospital, Miyagi, Japan*

### **O51-1 Three cases of smooth curve atrioventricular nodal reentrant tachycardia (AVNRT) which ATP administration was useful to prove of atrioventricular(AV) dual pathway**

Masahiro Sekigawa<sup>1</sup>, Yasuteru Yamauchi<sup>1</sup>, Osamu Inaba<sup>1</sup>, Shu Yamashita<sup>1</sup>, Tatsuhiko Hirao<sup>1</sup>, Junji Yamaguchi<sup>1</sup>, Takamasa Iwai<sup>1</sup>, Hirofumi Arai<sup>1</sup>, Satoshi Shoji<sup>1</sup>, Kandou Kawahatsu<sup>1</sup>, Ryouichi Miyazaki<sup>1</sup>, Tetsuo Yamaguchi<sup>1</sup>, Nobuhiro Hara<sup>1</sup>, Tomoyuki Umemoto<sup>1</sup>, Takamichi Miyamoto<sup>1</sup>, Toru Obayashi<sup>1</sup>, Kenzo Hirao<sup>2</sup>

*<sup>1</sup>Department of Cardiology, Musashino Red Cross Hospital, Tokyo, Japan, <sup>2</sup>Hospital Heart Rhythm Center, Tokyo Medical and Dental University, Tokyo, Japan*

### **O51-2 Successful catheter ablation for uncommon type AV reentrant tachycardia in a patient with persistent left superior vena cava**

Seifuku Kyo, Yasuhiro Ogawa, Hajime Imai, Yosuke Negishi, Yosuke Murase, Noriaki Otake, Hiroaki Sawada, Yoshihito Arao, Keisuke Sakakibara, Katsuhiro Kawaguchi

*Department of Cardiology, Komaki City Hospital, Aichi, Japan*

### **O51-3 Electrophysiological Differences in Antegrade Conduction Properties between Slow-fast and Slow-slow Form of Atrioventricular Nodal Reentrant Tachycardia**

Yoshiaki Yamaguchi, Koji Kumagai, Masahiro Nakano, Daisuke Kutsuzawa, Eri Goto, Kentaro Minami, Satoru Shimizu, Toshiaki Yano, Takehito Sasaki, Kohki Nakamura, Shigeto Naito, Shigeru Oshima

*Gunma Cardiovascular Center, Gunma, Japan*

### **O51-4 A cases of uncommon atrioventricular node reentry tachycardia with multiple pathways that exhibited VAAV conduction style by ventrial-atrial double response**

Yuriko Narabayashi, Mahito Noro, Takahito Takagi, Naohiko Sahara, Hikari Hashimoto, Naoshi Ito, Yoshinari Enomoto, Naoki Tezuka, Tsuyoshi Sakai, Keijiro Nakamura, Shingo Kujime, Takao Sakata, Kaoru Sugi

*Devision of Cardiovascular Medicine, Toho University Ohashi Medical Center, Tokyo, Japan*

*Friday, 31 July*

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**O51-5 Utility of a Lewis lead for distinguishing AVRT from typical AVNRT**

**Yoshinao Yazaki**, Yoshinari Goseki, Shuuichirou Kazawa, Muryo Terasawa, Ken Takarada, Yukio Saitoh, Tomoko Sakaida, Kazuhiro Satomi, Akira Yamashina

*Department of Cardiology, Tokyo Medical University, Tokyo, Japan*

## SVT 3

**Chairs Yoshiaki Kaneko**

*Department of Medicine and Biological Sciences, Gunma University, Gunma, Japan*

**Fumio Suzuki**

*Department of Cardiovascular Medicine, Fukujuji Hospital, Tokyo, Japan*

### **O52-1 A familial Wolff-Parkinson-White Syndrome with multiple accessory pathways and atrial degeneration documented by magnetic resonance imaging**

**Tomonori Watanabe**<sup>1</sup>, Yasushi Imai<sup>1</sup>, Hitoshi Hachiya<sup>2</sup>, Yasuhiro Yokoyama<sup>1</sup>, Hiroaki Watanabe<sup>1</sup>, Tomoyuki Kabutoya<sup>1</sup>, Kazuomi Kario<sup>1</sup>

<sup>1</sup>*Division of Cardiovascular Medicine, Department of Internal Medicine, Jichi Medical University, Tochigi, Japan,*

<sup>2</sup>*Department of Cardiology, Tsuchiura Kyodo General Hospital, Ibaraki, Japan*

### **O52-2 Radiofrequency Catheter Ablation Restores LV Contractility in Children with WPW Syndrome Accompanied with Left Ventricular Dysfunction**

**Eiji Morihana**<sup>1</sup>, Yasushi Mukai<sup>2</sup>, Hiroya Ushinohama<sup>3</sup>, Yasutaka Nakashima<sup>1</sup>, Eiko Terashi<sup>1</sup>, Kiyoshi Uike<sup>1</sup>, Yuuichiro Hirata<sup>1</sup>, Hazumu Nagata<sup>1</sup>, Kenichiro Yamamura<sup>1</sup>, Toshiro Hara<sup>1</sup>

<sup>1</sup>*Department of Pediatrics, Kyushu University Graduate School of Medical Sciences, Fukuoka, Japan,* <sup>2</sup>*Department of Cardiovascular Medicine, Kyushu University Graduate School of Medical Sciences, Fukuoka, Japan,* <sup>3</sup>*Department of Pediatric Cardiology, Fukuoka Children's Hospital, Fukuoka, Japan*

### **O52-3 An retrograde accessory pathway conduction revealed only by short-coupling ventricular stimuli**

**Yasuhiro Matsuda**, Takashi Kanda, Masaharu Masuda, Akihiro Sunaga, Masashi Fujita, Osamu Iida, Shin Okamoto, Takayuki Ishihara, Kiyonori Nanto, Tatsuya Shiraki, Takuya Tsujimura, Shota Okuno, Koji Yanaka, Masaaki Uematsu

*Kansai Rosai Hospital Cardiovascular Center, Hyogo, Japan*

### **O52-4 Approach to the posteroseptal atrioventricular accessory pathway: A case report**

**Etsuko Ikeda**, Masakazu Miyamoto, Atsushi Mori, Chikara Takahashi, Tomohiro Kawaguchi, Wakako Yoshikawa, Jun Ida, Masaki Yoshikawa, Takefumi Oka

*Tsuyama Central Hospital, Okayama, Japan*

*Friday, 31 July*

**O52-5**

**Two Cases of Adenosine-sensitive Atrial Tachycardia Originating from the Tricuspid Annulus**

**Mutsuki Miyagawa<sup>1</sup>, Mina Hatsuno<sup>1</sup>, Yuji Watari<sup>1</sup>, Takeshi Yamakawa<sup>1</sup>, Taiji Furukawa<sup>2</sup>, Ken Kozuma<sup>1</sup>**

*<sup>1</sup>Department of Medicine, Teikyo University School of Medicine, Tokyo, Japan, <sup>2</sup>Laboratory Medicine, Teikyo University School of Medicine, Tokyo, Japan*

## ECG Assessment 3★

**Chairs** Yoshiki Kusama

*Department of Cardiology, Nippon Medical School Tama Nagayama Hospital, Tokyo, Japan*

**Yuji Kasamaki**

*Department of Internal Medicine, Nihon University Itabashi Hospital, Tokyo, Japan*

### O53-1 Analyzing 12 Lead ECG to Predict the Origin of Premature Ventricular Contraction

**Shin Inada**<sup>1</sup>, Nitaro Shibata<sup>2</sup>, Takashi Ashihara<sup>3</sup>, Kazuyuki Mitsui<sup>4</sup>, Kazuo Nakazawa<sup>1</sup>

*<sup>1</sup>National Cerebral and Cardiovascular Center Research Institute, Osaka, Japan, <sup>2</sup>Shinjuku Mitsui Building Clinic, Tokyo, Japan, <sup>3</sup>Department of Cardiovascular Medicine, Heart Rhythm Center, Shiga University of Medical Science, Shiga, Japan, <sup>4</sup>Graduate School of Advanced Science and Technology, Tokyo Denki University, Tokyo, Japan*

### O53-2 Report from Home Electrocardiograph Committee. Usefulness for the Evaluation of Various Cardiac Symptoms in Women

**Masaaki Yashima**<sup>1</sup>, Yayoi Tsukada<sup>1</sup>, Kayoko Sato<sup>2</sup>, Seiji Fukushima<sup>3</sup>, Keiko Amano<sup>4</sup>, Takao Katoh<sup>5</sup>

*<sup>1</sup>Department of Cardiovascular Medicine, Nippon Medical School, Tokyo, Japan, <sup>2</sup>Department of Cardiovascular Medicine, Tokyo Women's University, Tokyo, Japan, <sup>3</sup>Ukima Chuou Hospital, Tokyo, Japan, <sup>4</sup>Seifu-sou Hospital, Saitama, Japan, <sup>5</sup>International University of Health and Welfare Mita Hospital, Tokyo, Japan*

### O53-3 The QRS morphology pattern in V5R is a novel and simple parameter for differentiating the origin of idiopathic outflow tract ventricular arrhythmias

**Miyako Igarashi**, Akihiko Nogami, Yukio Sekiguchi, Kenji Kuroki, Hiro Yamasaki, Takeshi Machino, Yoshiaki Yui, Kojiro Ogawa, Yasutoshi Shinoda, Eikou Sai, Keita Masuda, Ahmed Talib, Nobuyuki Murakoshi, Keisuke Kuga, Kazutaka Aonuma

*Cardiovascular Division, Faculty of Medicine, University of Tsukuba, Ibaraki, Japan*

### O53-4 ECG changes in three patients after the exchange of atenolol(hydrophilic beta blocker) for bisoprolol(lipophylic beta blocker)-The change of the plateau in action potential

**Makoto Tamura**

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

# Friday, 31 July

**O53-5**

**Comparison of paced QRS duration and paced fragmentation during right ventricular apical pacing between Brugada syndrome and arrhythmogenic right ventricular cardiomyopathy**

**Naoya Kataoka<sup>1</sup>, Koichi Mizumaki<sup>2</sup>, Yosuke Nakatani<sup>1</sup>, Tamotsu Sakamoto<sup>1</sup>, Kunihiro Nishida<sup>1</sup>, Hiroshi Inoue<sup>1</sup>**

*<sup>1</sup>The Second Department of Internal Medicine, University of Toyama, Toyama, Japan, <sup>2</sup>Clinical Research and Ethics Center, University of Toyama, Toyama, Japan*

**Room 5** 11:50-12:50 Luncheon Seminar28 [LS28]

## **The Evaluation of Myocardial Fibrosis by Cardiac Magnetic Resonance Imaging**

**Chair** Yasushi Akutsu

*Director of Internal Medicine and Cardiology, Associate Professor of Clinical Research Institute for Clinical Pharmacology & Therapeutics, Showa University Karasuyama Hospital, Tokyo, Japan*

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**LS28-1** **The Evaluation of Myocardial Fibrosis by Cardiac Magnetic Resonance Imaging**

**Kunihiko Teraoka**

*Sakakibara Heart Institute Clinic, Japan Reserch Promotion Society for Cardiovascular Disease, Tokyo, Japan*

*(Siemens Japan K.K.)*



## VT 7

**Chairs** Tsuyoshi Shiga

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

**Masayuki Sakurai**

*Department of Cardiology, Hokko Memorial Hospital, Hokkaido, Japan*

### O54-1 Predictors for Upcoming ICD Therapeutic Episodes among Common Data in Daily Device Clinic

Tamami Fujiishi<sup>1</sup>, Shinichi Niwano<sup>1</sup>, Masami Murakami<sup>1</sup>, Hironori Nakamura<sup>1</sup>, Tazuru Igarashi<sup>1</sup>, Naruya Ishizue<sup>1</sup>, Tomoharu Yoshizawa<sup>1</sup>, Jun Oikawa<sup>1</sup>, Jun Kishihara<sup>1</sup>, Hidehira Fukaya<sup>1</sup>, Hiroe Niwano<sup>2</sup>, Junya Ako<sup>1</sup>

*<sup>1</sup>Department of Cardiovascular Medicine, Kitasato University School of Medicine, Kanagawa, Japan, <sup>2</sup>Department of Education, Tamagawa University, Collage of Education, Tokyo, Japan*

### O54-2 Significant improvement of defibrillation threshold after removal of abandoned epicardial defibrillation patches

Takuro Nishimura, Yasuhiro Shirai, Susumu Tao, Takeshi Sasaki, Tetsuo Sasano, Mihoko Kawabata, Masahiko Goya, Kenzo Hirao

*Heart Rhythm Center, Tokyo Medical and Dental University, Tokyo, Japan*

### O54-3 Impact of anti-tachycardia pacing therapy on slow ventricular tachycardia in patients treated by amiodarone

Michiko Imai, Morio Shoda, Tetsuyuki Manaka, Koichiro Ejima, Daigo Yagishita, Ken Kato, Ryuta Henmi, Nobuhisa Hagiwara

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

### O54-4 The efficacy of the standard iv-Amio protocol

Yasuhito Kotake, Takashi Kurita, Yuzuru Akaiwa, Ryobun Yasuoka, Koichiro Motoki, Shunichi Miyazaki

*Division of Cardiology, Department of Medicine, Faculty of Medicine, Kinki University, Osaka, Japan*

### O54-5 Extreme electrical storm and frequent defibrillator shocks in a long QT syndrome patient with acute colonic diverticulitis

Chikaya Omichi, Hiroshi Narasaki, Daisuke Fujii

*Department of Cardiology, JCHO Tokyo Shinjuku Medical Center, Tokyo, Japan*

VT 8★

**Chairs Kazuhiro Suyama**

*Department of Internal Medicine, Yodakubo Hospital, Nagano, Japan*

**Masaomi Chinushi**

*School of Health Sciences, Niigata University, Niigata, Japan*

**O55-1 Epicardial map guided ablation for a VT storm originating from the LV summit in a patient with non-ischemic cardiomyopathy**

**Yuichi Hori**, Shiro Nakahara, Naofumi Tsukada, Akiko Okano, Noritaka Toratani, Yoshihiko Sakai

*Department of Cardiology, Dokkyo Medical University Koshigaya Hospital, Saitama, Japan*

**O55-2 Successful catheter ablation of VT/VF triggered by PVC in acute phase of myocardial infarction**

**Sachiko Bando**, Takeshi Soeki, Tomomi Matsuura, Takeshi Tobiume, Masataka Sata

*The Department of Cardiology, University of Tokushima, Tokushima, Japan*

**O55-3 A case with frequent premature ventricular contractions originated from left ventricular outflow tract eliminated by radiofrequency energy application from endocardial and epicardial site**

**Takatoshi Shigeta**<sup>1</sup>, Hiroyuki Okada<sup>1</sup>, Masahiro Hada<sup>1</sup>, Masao Yamaguchi<sup>1</sup>, Tatsuya Fujinami<sup>1</sup>, Go Ishimaru<sup>1</sup>, Hiroshi Inagaki<sup>1</sup>, Nobuo Toshida<sup>1</sup>, Toshihiko Takamoto<sup>1</sup>, Kenzo Hirao<sup>2</sup>

<sup>1</sup>Cardiovascular Medicine, Soka Municipal Hospital, Saitama, Japan, <sup>2</sup>Heart Rhythm Center, Tokyo Medical and Dental University, Tokyo, Japan

**O55-4 A case of recurrent ventricular tachycardia in patient with dilated cardiomyopathy diminished by combination therapy of repeated epicardial catheter ablation and antiarrhythmic agents**

**Hiroaki Nakamura**, Makoto Araki, Noboru Ichihara, Takamitsu Takagi, Jin Iwasawa, Akio Kuroi, Shinsuke Miyazaki, Hiroshi Taniguchi, Hitoshi Hachiya, Yoshito Iesaka

*Division of Cardiology, Cardiovascular Center, Tsuchiura Kyodo Hospital, Ibaraki, Japan*

**O55-5 High-Density Pace-mapping to Identify Critical Isthmus of Unmappable Postinfarct Ventricular Tachycardia**

**Yuichi Hanaki**<sup>1</sup>, Yuki Komatsu<sup>1</sup>, Shinya Kowase<sup>1</sup>, Kenji Kurosaki<sup>1</sup>, Akihiko Nogami<sup>2</sup>

<sup>1</sup>Department of Heart Rhythm Management, Yokohama Rosai Hospital, Kanagawa, Japan, <sup>2</sup>Department of Cardiology, University of Tsukuba, Ibaraki, Japan

## VT 9

**Chairs Koichi Sagara**

*Department of Cardiology, The Cardiovascular Institute, Tokyo, Japan*

**Kenji Enta**

*Department of Cardiology, Ogikubo Hospital, Tokyo, Japan*

### **O56-1 Frequent premature ventricular contractions originating from LV summit ablated from the distal great cardiac vein by irrigated radiofrequency catheter ablation**

**Yoshihisa Nagata<sup>1</sup>, Joji Morii<sup>2</sup>, Tomoo Yasuda<sup>2</sup>, Satoshi Imaizumi<sup>2</sup>, Yuka Hitaka<sup>2</sup>, Akira Matsunaga<sup>1</sup>, Naomichi Matsumoto<sup>1</sup>, Masahiro Ogawa<sup>2</sup>, Keiji Saku<sup>2</sup>**

*<sup>1</sup>Clinical Laboratory, Fukuoka University Hospital, Fukuoka, Japan, <sup>2</sup>Department of Cardiology, Fukuoka University Hospital, Fukuoka, Japan*

### **O56-2 A case of premature ventricular complexes originating from the right ventricular septum beneath His bundle region, successfully ablated in the noncoronary cusp**

**Tomomichi Suzuki, Hiroaki Kobayashi, Daizo Ishihara, Shigeki Kobayashi**

*The Department of Cardiology, Inazawa Municipal Hospital, Aichi, Japan*

### **O56-3 A Case of Verapamil-Sensitive Idiopathic Left Ventricular Tachycardia Originated from Left Anterior Papillary Muscle**

**Miwa Kikuchi, Kaoru Tanno, Fumito Miyoshi, Saoko Ikeda, Seita Kondo, Masayuki Sakurai, Takatoshi Sato**

*Cardiovascular Disease Center, Showa University, Koto Toyosu Hospital, Tokyo, Japan*

### **O56-4 Successful Ablation for Ventricular Tachycardia after Surgical Repair of Tetralogy of Fallot by Conduction Block between Two Transannular Patches Under Intracardiac Echocardiographic Guidance**

**Kengo Korai<sup>1</sup>, Yoshimori An<sup>1</sup>, Ken-ichi Hiroshima<sup>1</sup>, Michio Nagashima<sup>1</sup>, Shota Tohoku<sup>1</sup>, Kenji Ando<sup>1</sup>, Tomoaki Ito<sup>2</sup>, Harushi Niu<sup>2</sup>, Masahiko Goya<sup>3</sup>**

*<sup>1</sup>Department of Cardiology, Kokura Memorial Hospital, Fukuoka, Japan, <sup>2</sup>Department of Clinical Engineering, Kokura Memorial Hospital, Fukuoka, Japan, <sup>3</sup>Department of Cardiovascular Medicine, Tokyo Medical and Dental University, Tokyo, Japan*

### **O56-5 A successful radiofrequency catheter ablation for frequent premature ventricular complexes via distal great cardiac vein using contact force sensing catheter**

**Hideyuki Hasebe**

*Department of Arrhythmology, Shizuoka Saiseikai General Hospital, Shizuoka, Japan*

## Lead 1

**Chairs Tomoshige Morimoto**

*Department of Thoracic and Cardiovascular Surgery, Osaka Medical College, Osaka, Japan*

**Yoshifumi Ikeda**

*Saitama Medical University International Medical Center Cardiology, Saitama, Japan*

### O57-1 Initial experience of percutaneous extraction of infected cardiac implantable electric devices using excimer laser

**Ayako Okada, Wataru Shoin, Koji Yoshie, Yasutaka Oguchi, Takahiro Takeuchi, Kazunori Aizawa, Takeshi Tomita, Morio Shoda**

*The Department of Cardiovascular Medicine, Shinshu University, Nagano, Japan*

### O57-2 Additional report for transvenous lead extraction (Fujiwara method) at our hospital

**Tatsuya Saito<sup>1</sup>, Osamu Date<sup>1</sup>, Seiichiro Sakurai<sup>2</sup>, Kouko Yamazaki<sup>2</sup>, Daisuke Hotta<sup>2</sup>, Masaru Tsukamoto<sup>1</sup>, Hideo Yokoyama<sup>1</sup>, Kenjiro Kikuchi<sup>2</sup>**

*<sup>1</sup>Department of Cardiovascular Surgery, Hokkaido Cardiovascular Hospital, Hokkaido, Japan, <sup>2</sup>Department of Cardiology, Hokkaido Cardiovascular Hospital, Hokkaido, Japan*

### O57-3 The prevalence and clinical characteristics in the patients who underwent lead extraction using a femoral approach

**Kenji Kuroki, Yukio Sekiguchi, Tomohiko Harunari, Mitsuhiro Fukata, Kojiro Ogawa, Yoshiaki Yui, Eikou Sai, Yasutoshi Shinoda, Takeshi Machino, Miyako Igarashi, Keisuke Kuga, Akihiko Nogami, Kazutaka Aonuma**

*The Cardiovascular Division, Faculty of Medicine, University of Tsukuba, Ibaraki, Japan*

### O57-4 Successful four leads extraction and implantation of new CRT device using existing epicardial lead

**Wataru Shoin, Morio Shoda, Koji Yoshie, Yasutaka Oguchi, Takahiro Takeuchi, Ayako Okada, Uichi Ikeda**

*Department of Cardiovascular Medicine, Shinshu University School of Medicine, Nagano, Japan*

### O57-5 Single center experiences of the device extraction with using the excimer laser sheath

**Sayaka Tanaka, Yoshifumi Ikeda, Ritsushi Kato, Takahiko Nagase, Yuichiro Shiki, Naoko Yozawa, Shiro Iwanaga, Shigeyuki Nishimura, Kazuo Matsumoto**

*Saitama Medical University, International Medical Center, Saitama, Japan*

## Lead 2

**Chairs** **Kyoko Soejima**

*Department of Cardiology, Kyorin University Hospital, Tokyo, Japan*

**Chikashi Suga**

*Suga Clinic, Saitama, Japan / Jichi Medical University Saitama Medical Center, Saitama, Japan*

### **O58-1 Pathologic exploration of the favorite adhesion sites of the implanted intracardiac pacemaker electrodes**

**Taka-Aki Matsuyama<sup>1</sup>**, Hideo Okamura<sup>2</sup>, Hatsue Ishibashi-Ueda<sup>1</sup>, Takashi Noda<sup>2</sup>, Shiro Kamakura<sup>2</sup>, Kengo Kusano<sup>2</sup>

*<sup>1</sup>Department of Pathology, National Cerebral and Cardiovascular Center, Osaka, Japan, <sup>2</sup>Division of Arrhythmia and Electrophysiology, Department of Cardiovascular Medicine, National Cerebral and Cardiovascular Center, Osaka, Japan*

### **O58-2 Recurrence of cardiovascular implantable electronic device infection after percutaneous lead extraction**

**Takashi Yamada**, Masao Ooshima, Yusuke Taniguchi, Hiroki Hayashi, Shinya Okabe, Kaoki Katoh, Hiroyuki Johno, Hirotaka Murata

*Cardiovascular Center, Iseikai Hospital, Osaka, Japan*

### **O58-3 Usefulness of Intracardiac Echocardiography for Detecting Bacterial Vegetations Associated with Electronic Device Lead Infection**

**Takeshi Sasaki**, Masahiko Goya, Takuro Nishimura, Yasuhiro Shirai, Susumu Tao, Masateru Takigawa, Mihoko Kawabata, Tetsuo Sasano, Kenzo Hirao

*Heart Rhythm Center, Tokyo Medical and Dental University, Tokyo, Japan*

### **O58-4 Useful Marker for Prospect of Cardiovascular Implantable Electronic Device Infection in Perioperative Period**

**Masaaki Kurata**, Daisuke Wakatsuki, Hisa Shimojima

*The Department of Cardiology at Fujigaoka Hospital, University of Showa, Kanagawa, Japan*

## ICD 1

**Chairs Toshiko Nakai**

*Department of Cardiovascular Medicine, Nihon University School of Medicine, Tokyo, Japan*

**Satoru Miyanaga**

*Department of Cardiology, The Jikei University Kashiwa Hospital, Chiba, Japan*

### **O59-1 Pectoral myopotential oversensing in ICD patient with bipolar epicardial sensing lead found by lead integrated alert:A case report**

**Kyoichiro Yazaki**, Yoichi Ajiro, Kei Tsukamoto, Kunihiko Shimizu, Takashi Saito, Sae Morita, Yasunori Kobayashi, Fumiaki Mori, Kazunori Iwade

*Department of Cardiology, National Hospital Organization Yokohama Medical Center, Kanagawa, Japan*

### **O59-2 Efficacy of using implantable cardioverter defibrillators with ST monitoring function in patients with coronary artery disease**

**Tetsuya Watanabe**<sup>1</sup>, Yukinori Shinoda<sup>1</sup>, Kuniyasu Ikeoka<sup>1</sup>, Horooki Inui<sup>1</sup>, Takashi Kanda<sup>2</sup>, Masaaki Uematsu<sup>2</sup>, Shiro Hoshida<sup>1</sup>

*<sup>1</sup>Department of Cardiology, Yao Municipal Hospital, Osaka, Japan, <sup>2</sup>Kansai Rosai Hospital, Cardiovascular Center, Hyogo, Japan*

### **O59-3 Evaluation of clinical efficacy and problem of PainFree SST programming in discrimination of inappropriate ICD therapy**

**Shingo Sasaki**<sup>1</sup>, Takahiko Kinjo<sup>2</sup>, Yuji Ishida<sup>2</sup>, Kenichi Sasaki<sup>2</sup>, Daisuke Horiuchi<sup>1</sup>, Taihei Itoh<sup>2</sup>, Masaomi Kimura<sup>2</sup>, Ken Okumura<sup>2</sup>

*<sup>1</sup>Department of Advance Management of Cardiac Arrhythmias, Hirosaki University School of Medicine, Aomori, Japan, <sup>2</sup>Department of Cardiology, Hirosaki University School of Medicine, Aomori, Japan*

### **O59-4 A Case of Inappropriate ICD Therapies in the Patient with Overlap Syndrome of LQT3 and Brugada Syndrome Effectively Treated by Ablation for Atrial Fibrillation**

**Minetaka Maeda**, Tomohiro Arakaki, Kazuaki Okuyama, Kageyuki Ooba, Masanori Kakazu, Osamu Arasaki

*Cardiovascular Medicine, Tomishiro Central Hospital, Okinawa, Japan*

### **O59-5 Clinical experience among long QT syndrome patients with the wearable cardioverter defibrillator**

**Koji Yoshie**, Ayako Okada, Wataru Shoin, Takahiro Takeuchi, Morio Shoda, Uichi Ikeda

*Department of Cardiovascular Medicine, Shinshu University School of Medicine, Nagano, Japan*

# Friday, 31 July

**Room 6** 11:50-12:50 Luncheon Seminar29 [LS29]

## **Pursue the racial and individual difference ★**

**Chair** Wataru Shimizu

*Department of Cardiovascular Medicine, Graduate School of Medicine, Nippon Medical School, Tokyo, Japan*

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**LS29-1** **Clinical use of apixaban in a Japanese University Hospital: Focusing on the patient backgrounds and drug efficacy**

**Meiso Hayashi**

*Department of Cardiovascular Medicine, Graduate School of Medicine, Nippon Medical School, Tokyo, Japan*

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**LS29-2** **Inherited syndromes attributable to genetic defects in sodium channel function**

**Charles Antzelevitch**

*Cardiovascular Research Program, Lankenau Institute of Medical Research, USA*

*(Bristol-Myers K.K. / Pfizer Japan Inc.)*

## ICD 2

**Chairs** Katsuhiko Imai

*Department of Cardiovascular Surgery, Hiroshima University Hospital, Hiroshima, Japan*

**Hideo Okamura**

*Department of Cardiovascular Medicine, National Cerebral and Cardiovascular Center, Osaka, Japan*

### O60-1 The influence of cardiac function by shock therapy

Hiroshi Shimada<sup>1</sup>, Noriyoshi Yamawake<sup>1</sup>, Kiko Lee<sup>1</sup>, Munehiro Iiya<sup>1</sup>, Ryo Masuda<sup>1</sup>, Rena Nakamura<sup>1</sup>, Yasuaki Hada<sup>1</sup>, Kuniaki Nakano<sup>1</sup>, Tomomasa Takamiya<sup>1</sup>, Masato Shimizu<sup>1</sup>, Hiroyuki Fujii<sup>1</sup>, Mitsuhiro Nishizaki<sup>1</sup>, Harumizu Sakurada<sup>2</sup>, Masayasu Hiraoka<sup>3</sup>

*<sup>1</sup>Department of Cardiology, Yokohama Minami Kyosai Hospital, Kanagawa, Japan, <sup>2</sup>Tokyo Metropolitan Health and Medical Treatment Corporation Ohkubo Hospital, Tokyo, Japan, <sup>3</sup>Toride-Kitasouma Medical Association Hospital, Ibaraki, Japan*

### O60-2 Prognostic Value of Lower Limit of Vulnerability in Patients with Implantable Cardioverter-Defibrillator Implantation

Hirofumi Mitsuyama, Hisashi Yokoshiki, Kazuya Mizukami, Taro Tenma, Hiroyuki Tsutsui

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

### O60-3 Importance of the Presence of J-wave as a Predictor for Life-threatening Arrhythmia in ICD-implanted Patients

Naruya Ishizue<sup>1</sup>, Shinichi Niwano<sup>1</sup>, Hironori Nakamura<sup>1</sup>, Tazuru Igarashi<sup>1</sup>, Tamami Fujiishi<sup>1</sup>, Tomoharu Yoshizawa<sup>1</sup>, Jun Oikawa<sup>1</sup>, Jun Kishihara<sup>1</sup>, Masami Murakami<sup>1</sup>, Hidehira Fukaya<sup>1</sup>, Hiroe Niwano<sup>2</sup>, Junya Ako<sup>1</sup>

*<sup>1</sup>Department of Cardiovascular Medicine, Kitasato University School of Medicine, Kanagawa, Japan, <sup>2</sup>Department of Education, Tamagawa University, Collage of Education, Tokyo, Japan*

### O60-4 Electrical storm in implantable cardioverter-defibrillator recipients with structural heart disease

Akira Shimane, Katsunori Okajima, Kunihiro Kiuchi, Kiminobu Yokoi, Jin Teranishi, Kosuke Aoki, Misato Chimura, Hideo Tsubata, Taishi Miyata, Yuki Matsuoka, Takayoshi Toba, Shogo Ohishi, Takahiro Sawada, Yasue Tsukishiro, Tetsuuri Ohnishi, Seiichi Kobayashi, Shinichiro Yamada, Yasuyo Taniguchi, Hiroya Kawai, Yoshinori Yasaka

*Department of Cardiology, Himeji Cardiovascular Center, Hyogo, Japan*



# Friday, 31 July

**O60-5**

## **Role of recent catheter ablation for the treatment of electrical storm in patients with structural heart diseases**

**Yukio Hosaka**<sup>1</sup>, Masaomi Chinushi<sup>2</sup>, Kazuyoshi Takahashi<sup>1</sup>, Akiko Sanada<sup>1</sup>, Asami Kashiwa<sup>1</sup>, Kazuyuki Ozaki<sup>1</sup>, Keiichi Tsuchida<sup>1</sup>, Yuki Fujihara<sup>1</sup>, Norihito Nakamura<sup>1</sup>, Jiro Hiroki<sup>1</sup>, Hirotaka Oda<sup>1</sup>

<sup>1</sup>Department of Cardiology, Niigata City General Hospital, Niigata, Japan, <sup>2</sup>School of Health Science, Niigata University School of Medicine, Niigata, Japan

## ICD 3

**Chairs** Yoshitaka Sugawara

*Department of Cardiovascular Medicine, Saitama Medical Center, Jichi Medical University, Saitama, Japan*

**Yasushi Oginosawa**

*The Second Department of Internal Medicine, University of Occupational and Environmental Health Japan School of Medicine, Fukuoka, Japan*

### O61-1 The Lead Revision or Upgrade for Patients with the Cardiovascular Implantable Electronic Devices

**Yuichi Momose**, Toshiaki Satoh, Noriko Matsushita, Satoshi Higuchi, Kyoko Hoshida, Yosuke Miwa, Ikuko Togashi, Akiko Ueda, Kyoko Soejima, Hideaki Yoshino

*The second Department of Internal Medicine, University of Kyorin, Tokyo, Japan*

### O61-2 Study of defibrillation threshold and myocardial injury in the different ICD implantation site with single coil and dual coil

**Hikari Hashimoto**<sup>1</sup>, Mahito Noro<sup>1</sup>, Xin Zhu<sup>2</sup>, Takahito Takagi<sup>1</sup>, Naohiko Sahara<sup>1</sup>, Yuriko Narabayashi<sup>1</sup>, Naoshi Ito<sup>1</sup>, Yoshinari Enomoto<sup>1</sup>, Tsuyoshi Sakai<sup>3</sup>, Keijiro Nakamura<sup>1</sup>, Shingo Kujime<sup>1</sup>, Takao Sakata<sup>1</sup>, Kaoru Sugi<sup>1</sup>

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

### O61-3 Trends in the incidence of tachycardia therapy in ICD patients through the decade

**Hiroshi Furusho**, Naomi Kanamori, Takashi Kusayama, Shinichiro Takashima, Takeshi Kato, Hisayoshi Murai, Soichiro Usui, Shuichi Kaneko, Masayuki Takamura

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

### O61-4 Deactivation of Implantable Cardioverter-defibrillator at the End of Life

**Noriko Matsushita**, Toshiaki Sato, Kyoko Soejima, Yuichi Momose, Satoshi Higuchi, Kyoko Hoshida, Akiko Maeda, Yosuke Miwa, Ikuko Togashi, Akiko Ueda, Hideaki Yoshino

*Department of Cardiology, Kyorin University Hospital, Tokyo, Japan*

### O61-5 Comparison of Submammary ICD Implantation in Young Women and Standard ICD Implantation

**Yumi Munetsugu**, Taku Asano, Yuya Nakamura, Koichiro Inokuchi, Yuta Chiba, Tatsuya Onuki, Yoshino Minoura, Norikazu Watanabe, Taro Adachi, Mitsuharu Kawamura, Youichi Kobayashi

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

## Congenital Heart Diseases

**Chairs** Hiroya Ushinohama

*Department of Pediatrics, Fukuoka Children's Hospital, Fukuoka, Japan*

**Yoshihito Hata**

*Cardiovascular Center, Showa University Northern Yokohama Hospital, Kanagawa, Japan*

### O62-1 Prognosis of radiofrequency catheter ablation in patients with twin atrioventricular nodes before TCPC procedure

**Keiko Toyohara**<sup>1</sup>, Tomomi Nishimura<sup>1</sup>, Takashi Kumamaru<sup>1</sup>, Kenji Miyamoto<sup>1</sup>, Tsutomu Wada<sup>1</sup>, Yoshimichi Kudou<sup>1</sup>, Daiji Takeuchi<sup>1</sup>, Morio Shoda<sup>2</sup>

<sup>1</sup>The Department of Pediatric Cardiology, Tokyo Women's Medical University, Tokyo, Japan, <sup>2</sup>The Department of Cardiology, Tokyo Women's Medical University, Tokyo, Japan

### O62-2 Long-term outcome of fetal arrhythmia

**Hisaaki Aoki**, Yasuhiro Hirano, Futoshi Kayatani

*Osaka Medical Center and Research Institute for Maternal and Child Health, Osaka, Japan*

### O62-3 The incidence of appropriate and inappropriate therapies in children and adolescents with implantable cardioverter defibrillator: A single-center experience

**Kazuhiro Shoya**<sup>1</sup>, Kanki Inoue<sup>2</sup>, Mayuko Yagawa<sup>2</sup>, Tomomi Ueda<sup>1</sup>, Kohei Tanizaki<sup>2</sup>, Tadahiro Yoshikawa<sup>1</sup>, In-Sam Park<sup>1</sup>, Jun Umemura<sup>2</sup>, Hitonobu Tomoike<sup>2</sup>

<sup>1</sup>Department of Pediatric Cardiology, Sakakibara Heart Institute, Japan Research Promotion Society for Cardiovascular Diseases, Tokyo, Japan, <sup>2</sup>Department of Cardiology, Sakakibara Heart Institute, Japan Research Promotion Society for Cardiovascular Diseases, Tokyo, Japan

### O62-4 Outcome of catheter ablation for supraventricular tachycardia in adult congenital heart disease after Fontan

**Kenji Miyamoto**<sup>1</sup>, Tomomi Nishimura<sup>1</sup>, Tsutomu Wada<sup>1</sup>, Yoshimichi Kudou<sup>1</sup>, Daiji Takeuchi<sup>1</sup>, Kazuhiro Takahashi<sup>1</sup>, Keiko Toyohara<sup>1</sup>, Toshio Nakanishi<sup>1</sup>, Tetsuyuki Manaka<sup>2</sup>, Koichiro Ejima<sup>2</sup>, Morio Shoda<sup>2</sup>, Nobuhisa Hagiwara<sup>2</sup>

<sup>1</sup>The Department of Pediatric Cardiology, Tokyo Women's Medical University, Tokyo, Japan, <sup>2</sup>The Department of Cardiology, Tokyo Women's Medical University, Tokyo, Japan

### O62-5 Severe sinus node dysfunction in tetralogy of Fallot with long lasting atrial flutter

**Hirohisa Muramoto**<sup>1</sup>, Atsushi Suzuki<sup>1</sup>, Koji Higuchi<sup>1</sup>, Yuya Utsugi<sup>1</sup>, Sawa Matsumoto<sup>1</sup>, Keiko Araki<sup>1</sup>, Takayuki Onishi<sup>1</sup>, Isshi Kobayashi<sup>1</sup>, Yuko Onishi<sup>1</sup>, Shigeo Umezawa<sup>1</sup>, Akihiro Niwa<sup>1</sup>, Yasuteru Yamauchi<sup>2</sup>, Kenzo Hirao<sup>3</sup>

<sup>1</sup>Department of Cardiology, Hiratsuka Kyosai Hospital, Kanagawa, Japan, <sup>2</sup>Department of Cardiology, Musashino Red Cross Hospital, Tokyo, Japan, <sup>3</sup>Heart Rhythm Center, Tokyo Dental Medical University, Tokyo, Japan

**Room 7** 8:30-9:30 Educational Lecture10 [EL10]

## **Inappropriate Shock and Way of Bail-out from the Trouble ★**

**Chair** Takashi Kurita

*Division of Cardiovascular Center, Department of Internal Medicine, Kinki University, Osaka, Japan*

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**EL10** **Inappropriate Shocks and Way of Bail-Out from the Trouble**

**Bernard Thibault**

*University of Montreal, Canada*

*Friday, 31 July*

**Room 7** 9:30-10:30 Educational Lecture11 [EL11]

## **Effect of Epicardial Ablation for Atrial Fibrillation ★**

**Chair** Kan Takayanagi

*Kasukabe Kosei Hospital, Saitama, Japan*

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**EL11** Usefulness of Epicardial Catheter Ablation in Repeated Procedure for Persistent Atrial Fibrillation: A Pilot Study

**Young-Hoon Kim**

*Korea University Anam Hospital, Korea*

**Room 7** 10:30-11:30 Guideline Commentary Session [GS]

## **Syncope and Driving Law: Restriction of Driving in Patients with Reflex Syncope**

**Chair Koichi Mizumaki**

*Clinical Research and Ethics Center, University of Toyama, Toyama, Japan*

**GS Syncope and Driving Law: Restriction of Driving in Patients with Reflex Syncope**

**Bonpei Takase<sup>1</sup>, Masataka Sumiyoshi<sup>2</sup>**

*<sup>1</sup>Department of Intensive Care Medicine, National Defense Medical College, Saitama, Japan, <sup>2</sup>Department of Cardiology, Juntendo University Nerima Hospital, Tokyo, Japan*

*Friday, 31 July*

**Room 7** 11:50-12:50 Luncheon Seminar30 [LS30]

**Protection from Sudden Cardiac Arrest Without Touching the Heart: S-ICD ★**

**Chair** Takashi Nitta

*Department of Cardiovascular Surgery, Nippon Medical School, Tokyo, Japan*

**LS30-1**

**Protection from Sudden Cardiac Arrest Without Touching the Heart: S-ICD**

**Shephal K. Doshi**

*Cardiac Electrophysiology and Pacing, Saint John's Health Center, USA*

*(Boston Scientific Japan)*

## AF Ablation 13

**Chairs** Hiroshi Tada

*Department of Cardiovascular Medicine, Faculty of Medical Sciences, University of Fukui, Fukui, Japan*

**Meiso Hayashi**

*Department of Cardiology, Nippon Medical School, Tokyo, Japan*

### O63-1 Impact of nadir balloon temperature of cryoablation with pulmonary vein isolation in atrial fibrillation patients

**Keita Watanabe**<sup>1</sup>, Junichi Nitta<sup>1</sup>, Yosuke Hayashi<sup>1</sup>, Yoshikazu Sato<sup>1</sup>, Yukihiro Inamura<sup>1</sup>, Masahito Suzuki<sup>1</sup>, Ken Negi<sup>1</sup>, Tatsuya Hayashi<sup>1</sup>, Akira Sato<sup>1</sup>, Tsunehiro Yamato<sup>1</sup>, Yutaka Matsumura<sup>1</sup>, Kihiro Asakawa<sup>1</sup>, Masahiko Goya<sup>2</sup>, Kenzo Hirao<sup>2</sup>

*<sup>1</sup>Department of Cardiology, Saitama Red Cross Hospital, Saitama, Japan, <sup>2</sup>Heart Rhythm Center, Tokyo Medical and Dental University, Tokyo, Japan*

### O63-2 Characteristics of immediate recurrences of atrial fibrillation after Cryoablation

**Yosuke Hayashi**<sup>1</sup>, Junichi Nitta<sup>1</sup>, Yoshikazu Sato<sup>1</sup>, Keita Watanabe<sup>1</sup>, Yukihiro Inamura<sup>1</sup>, Masahito Suzuki<sup>1</sup>, Ken Negi<sup>1</sup>, Tatsuya Hayashi<sup>1</sup>, Akira Sato<sup>1</sup>, Tsunehiro Yamato<sup>1</sup>, Yutaka Matsumura<sup>1</sup>, Kihiro Asakawa<sup>1</sup>, Masahiko Goya<sup>2</sup>, Kenzo Hirao<sup>2</sup>

*<sup>1</sup>Saitama Red Cross Hospital, Saitama, Japan, <sup>2</sup>Heart Rhythm Center, Tokyo Medical and Dental University, Tokyo, Japan*

### O63-3 Predictors of Successful Pulmonary Vein Isolation with Cryoballoon Catheter in Patients with Paroxysmal Atrial Fibrillation

**Takuro Nishimura**, Yasuhiro Shirai, Susumu Tao, Takeshi Sasaki, Tetsuo Sasano, Mihoko Kawabata, Masahiko Goya, Kenzo Hirao

*Heart Rhythm Center, Tokyo Medical and Dental University, Tokyo, Japan*

### O63-4 Cryoballoon ablation for pulmonary vein isolation to treat paroxysmal atrial fibrillation: First experience in a single center

**Masaomi Kimura**<sup>1</sup>, Daisuke Horiuchi<sup>1</sup>, Kenichi Sasaki<sup>2</sup>, Taihei Itoh<sup>1</sup>, Noriyoshi Kaname<sup>3</sup>, Yuji Ishida<sup>1</sup>, Takahiko Kinjo<sup>1</sup>, Shingo Sasaki<sup>1</sup>, Ken Okumura<sup>1</sup>

*<sup>1</sup>Department of Cardiology, Hirosaki University Graduate School of Medicine, Aomori, Japan, <sup>2</sup>Department of Advance Management of Cardiac Arrhythmias, Hirosaki University Graduate School of Medicine, Aomori, Japan, <sup>3</sup>Department of Internal Medicine, Chikamori Hospital, Kochi, Japan*

### O63-5 Acute and Short Term Procedural Outcomes of Using Cryoballoon Ablation

**Nobuaki Tanaka**, Koichi Inoue, Koji Tanaka, Yuko Toyoshima, Takafumi Oka, Yoshiyuki Orihara, Katsuomi Iwakura, Kenshi Fujii

*Sakurabashi Watanabe Hospital, Cardiovascular Center, Osaka, Japan*



## AF Clinical Study 3

**Chairs** Ichiro Watanabe

*Department of Cardiovascular Medicine, Nihon University Graduate School of Medicine, Tokyo, Japan*

**Taishi Kuwahara**

*Cardiovascular Center, Yokosuka Kyosai Hospital, Kanagawa, Japan*

### O64-1 Does the cavo-tricuspid isthmus ablation give benefits on the outcome of AF recurrence as an adjunct to AF ablation?

**Shunsuke Kawai**, Yasushi Mukai, Shujiro Inoue, Akiko Chishaki, Kenji Sunagawa

*Cardiovascular Medicine, Kyushu University, Fukuoka, Japan*

### O64-2 Factors Determining Fibrillation Cycle Length in the Surface ECG in Patients with Long-lasting Atrial Fibrillation

**Tazuru Igarashi**<sup>1</sup>, Shinichi Niwano<sup>1</sup>, Naruya Ishizue<sup>1</sup>, Tamami Fujiiishi<sup>1</sup>, Tomoharu Yoshizawa<sup>1</sup>, Jun Oikawa<sup>1</sup>, Jun Kishihara<sup>1</sup>, Masami Murakami<sup>1</sup>, Hidehira Fukaya<sup>1</sup>, Chiharu Noda<sup>1</sup>, Hiroe Niwano<sup>2</sup>, Junya Ako<sup>1</sup>

*<sup>1</sup>Department of Cardiovascular Medicine, Kitasato University School of Medicine, Kanagawa, Japan, <sup>2</sup>Department of Education, Tamagawa University, College of Education, Tokyo, Japan*

### O64-3 Impact of left ventricular diastolic dysfunction on exercise intolerance in patients with permanent atrial fibrillation

**Toshihiko Goto**, Kento Mori, Kenta Hachiya, Shohei Kikuchi, Noriyuki Ikehara, Kazuaki Wakami, Nobuyuki Ohte

*Department of Cardio-Renal Medicine and Hypertension, Nagoya City University Graduate School of Medical Sciences, Aichi, Japan*

### O64-4 Ankle brachial index as an independent predictor of mortality in Japanese patients with non-valvular atrial fibrillation

**Naoharu Yagi**, Shinya Suzuki, Takayuki Otsuka, Koichi Sagara, Takeshi Yamashita

*The Cardiovascular Institute, Tokyo, Japan*

### O64-5 Atrioventricular nodal remodeling resulting from persistent atrial fibrillation

**Akinori Sairaku**, Yukiko Nakano, Kazuyoshi Suenari, Takehito Tokuyama, Hiroshi Kawazoe, Yoshikazu Watanabe, Hiroya Matsumura, Shunsuke Tomomori, Yasuki Kihara

*Department of Cardiology, Hiroshima University, Hiroshima, Japan*

**Room 8** 10:30-11:30 Debate8 [D8]

## Is an Epicardial Ablation Considered as First-line Therapy ?

**Chair** Harumizu Sakurada

*Tokyo Metropolitan Health and Medical Treatment Corporation Ohkubo Hospital, Tokyo, Japan*

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**D8-1** **Pro**

**Yukio Sekiguchi**

*Cardiovascular Division, Faculty of Medicine, University of Tsukuba, Ibaraki, Japan*

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**D8-2** **Con**

**Kyoko Soejima**

*Department of Cardiology, Kyorin University Hospital, Tokyo, Japan*

# Friday, 31 July

**Room 8** 11:50-12:50 Luncheon Seminar31 [LS31]

## Excimer Laser lead extraction ★

**Chair Kazuo Matsumoto**

*Higashimatsuyama Medical Association Hospital, Saitama, Japan / Cardiology Department of International Medical Center Saitama Medical University, Saitama, Japan*

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### **LS31-1** Excimer Laser lead extraction

**Oussama Wazni**

*Cleveland Clinic, USA*

*(DVx Inc.)*

**Room 8** 13:00-14:00 Debate9 [D9]

## Is a High-energy Device Necessary for Elderly Patient?

**Chair** Takashi Kurita

*Division of Cardiovascular Center, Department of Internal Medicine, Kinki University, Osaka, Japan*

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**D9-1** **Pro**

**Toshiko Nakai**

*Department of Cardiovascular Medicine, Nihon University School of Medicine, Tokyo, Japan*

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**D9-2** **Con**

**Yoshifumi Ikeda**

*Saitama Medical University International Medical Center Cardiology, Saitama, Japan*

## AF Ablation 14

**Chairs** Yasuo Okumura

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

Seiichiro Matsuo

*Division of Cardiology, The Jikei University Hospital, Tokyo, Japan*

### O65-1 Significance of Dormant Conduction Provoked by Adenosine for Chronic Reconnection after Pulmonary Vein Isolation

Shunsuke Kuroda<sup>1</sup>, Akira Mizukami<sup>1</sup>, Maki Ono<sup>1</sup>, Makoto Suzuki<sup>1</sup>, Akihiko Matsumura<sup>1</sup>, Kenzo Hirao<sup>2</sup>, Mitsunori Isobe<sup>3</sup>, Yuji Hashimoto<sup>1</sup>

*<sup>1</sup>Department of Cardiology, Kameda Medical Center, Chiba, Japan, <sup>2</sup>Heart Rhythm Center, Tokyo Medical and Dental University, Tokyo, Japan, <sup>3</sup>Department of Cardiovascular Medicine, Tokyo Medical and Dental University, Tokyo, Japan*

### O65-2 Optimal Waiting Period after Completion of the Circumferential Pulmonary Vein Isolation to Assure Durability

Kojiro Tanimoto<sup>1</sup>, Akira Kunitomi<sup>2</sup>, Shin Kashimura<sup>2</sup>, Kohei Inagawa<sup>1</sup>, Takahiko Nishiyama<sup>2</sup>, Yoshinori Katsumata<sup>2</sup>, Yukinori Ikegami<sup>1</sup>, Takehiro Kimura<sup>2</sup>, Nobuhiro Nishiyama<sup>2</sup>, Kotaro Fukumoto<sup>2</sup>, Yoko Tanimoto<sup>2</sup>, Yukihiko Momiyama<sup>1</sup>, Seiji Takatsuki<sup>2</sup>

*<sup>1</sup>Department of Cardiology, NHO Tokyo Medical Center, Tokyo, Japan, <sup>2</sup>Department of Cardiology, Keio University School of Medicine, Tokyo, Japan*

### O65-3 Touch-up ablation and loss of pace capture on the isolation line can reduce the spontaneous pulmonary vein reconnection after pulmonary vein isolation

Akihiro Takitsume<sup>1</sup>, Taku Nishida<sup>1</sup>, Muneo Kurokawa<sup>2</sup>, Atsushi Maekawa<sup>2</sup>, Akihiro Sugimoto<sup>2</sup>, Kenji Onoue<sup>1</sup>, Satoshi Okayama<sup>1</sup>, Yukiji Takeda<sup>1</sup>, Makoto Watanabe<sup>1</sup>, Hiroyuki Kawata<sup>1</sup>, Rika Kawakami<sup>1</sup>, Michinori Kayashima<sup>2</sup>, Yoshihiko Saito<sup>1</sup>

*<sup>1</sup>The First Department of Internal Medicine, Nara Medical University, Nara, Japan, <sup>2</sup>The Medical Technology Center, Nara Medical University, Nara, Japan*

### O65-4 The Effects of Automated Lesion Tagging-based PV Isolation vs. Pace and Ablate Method on ATP-provoked Dormant PV Conduction

Kazumasa Sonoda<sup>1</sup>, Yasuo Okumura<sup>1</sup>, Ichiro Watanabe<sup>1</sup>, Koichi Nagashima<sup>1</sup>, Rikitake Kogawa<sup>1</sup>, Sayaka Kurokawa<sup>1</sup>, Naoko Sasaki<sup>1</sup>, Keiko Takahashi<sup>1</sup>, Kazuki Iso<sup>1</sup>, Kimie Ohkubo<sup>1</sup>, Toshiko Nakai<sup>1</sup>, Atsushi Hirayama<sup>1</sup>, Toshimasa Tosaka<sup>2</sup>

*<sup>1</sup>Division of Cardiology, Department of Medicine, Nihon University School of Medicine, Tokyo, Japan, <sup>2</sup>Tokyo Rinkai Hospital, Tokyo, Japan*

## AF Ablation 15

**Chairs** Koji Fukuda

*Department of Cardiovascular Medicine, Tohoku University Hospital, Miyagi, Japan*

Hiroshi Taniguchi

*Division of Cardiology, Cardiovascular Center, Tsuchiura Kyodo Hospital, Ibaraki, Japan*

### O66-1 Impact of CARTO Univu System on Radiation Exposure Time in Radiofrequency Catheter Ablation

Keita Masuda, Miyako Igarashi, Yasutoshi Shinoda, Kojiro Ogawa, Eikou Sai, Mitsutaka Fukata, Ahmed Talib, Yoshiaki Yui, Takeshi Machino, Kenji Kuroki, Yukio Sekiguchi, Akihiko Nogami, Kazutaka Aonuma

*Cardiovascular Division, Faculty of Medicine, University of Tsukuba, Ibaraki, Japan*

### O66-2 Who is the operator, that is the problem: A multicenter study

Akinori Sairaku<sup>1</sup>, Yukihiro Yoshida<sup>2</sup>, Yukiko Nakano<sup>1</sup>, Mayuho Maeda<sup>2</sup>, Yasuki Kihara<sup>1</sup>

*<sup>1</sup>Department of Cardiology, Hiroshima University, Hiroshima, Japan, <sup>2</sup>Department of Cardiology, Nagoya Daini Red Cross Hospital, Aichi, Japan*

### O66-3 Withdrawn

### O66-4 Pacing Based Non-inducibility or Spontaneous Termination of Atrial Fibrillation: Which Has a Better Prognosis after Catheter Ablation?

Toshiya Kurotobi, Naoto Kino, Takao Tsuchida, Masataka Yoshida, Yoshihisa Shimada

*Cardiovascular Division, Shiroyama Hospital, Osaka, Japan*

### O66-5 Pharmacological and Electrophysiological Inducibility Tests for Predicting of Response to Pulmonary Vein Isolation in Patients with Persistent Atrial Fibrillation

Takayuki Otsuka, Koichi Sagara, Takuto Arita, Naoharu Yagi, Shinya Suzuki, Takeshi Yamashita

*The Department of Cardiology, The Cardiovascular Institute, Tokyo, Japan*

# Friday, 31 July

Room 9 8:30-10:00 Medical Professional Session5 [MPS5]

## デバイスと電磁干渉の問題点

座長 佐久間一郎

東京大学大学院工学系研究科附属医療福祉工学開発評価研究センター

大木康則

埼玉医科大学総合医療センターMEサービス部

### MPS5-1 デバイスと電磁干渉の問題点

鈴木雅和

東北薬科大学病院臨床工学室

### MPS5-2 当院植込み型デバイス患者の電磁干渉対応の現状と問題点

山崎隆文<sup>1</sup>, 添田 信<sup>1</sup>, 木滝慶太郎<sup>1</sup>, 高島 昂<sup>1</sup>, 野口壮一<sup>1</sup>, 鈴木 誠<sup>2</sup>, 大野真紀<sup>2</sup>

<sup>1</sup>医療法人鉄蕉会亀田総合病院ME室, <sup>2</sup>医療法人鉄蕉会亀田総合病院循環器内科

### MPS5-3 当院、電磁干渉対策チーム (EMI Busters) 2014年活動報告

梅津 努<sup>1</sup>, 安島良輝子<sup>1</sup>, 助川みや子<sup>1</sup>, 縮 恭一<sup>2</sup>, 藤沢伸吉<sup>3</sup>, 小川幸二郎<sup>4</sup>, 黒木健志<sup>4</sup>, 五十嵐都<sup>4</sup>, 関口幸夫<sup>4</sup>, 野上昭彦<sup>4</sup>, 青沼和隆<sup>4</sup>

<sup>1</sup>筑波大学附属病院看護部CDRチーム, <sup>2</sup>筑波大学附属病院臨床機器管理センター, <sup>3</sup>筑波大学附属病院放射線部, <sup>4</sup>筑波大学附属病院循環器内科

### MPS5-4 デバイス電磁干渉概念の拡張の必要性

豊島 健

日本治療デバイス研究所

## アブレーション5 (メディカルプロフェッショナル)

座長 住友直方  
埼玉医科大学国際医療センター 小児心臓科

菅井義尚  
群馬県立心臓血管センター 循環器内科

### M7-1 高周波焼灼による肺静脈隔離術における総通電量と術後心嚢液貯留症例の因果関係の検討

工藤良介, 三好達也, 鈴木丈二, 四倉昭彦, 吉田 泉, 櫻井正之  
社会医療法人社団カレスサポロ北光記念病院

### M7-2 肺静脈隔離術中の洞結節障害を回避するための冠動脈CT活用

都築祐二<sup>1</sup>, 伊藤あゆ美<sup>1</sup>, 井戸田恵実<sup>1</sup>, 越塚 誠<sup>1</sup>, 朱宮信光<sup>1</sup>, 小林裕明<sup>2</sup>, 鈴木智理<sup>2</sup>  
<sup>1</sup>稲沢市民病院放射線科, <sup>2</sup>稲沢市民病院循環器内科

### M7-3 3Dマッピング用心臓CTにおける造影剤減量を目的としたVolume scan法の有用性

中武 大<sup>1</sup>, 堀川隆浩<sup>1</sup>, 坂口正義<sup>1</sup>, 上村忠男<sup>1</sup>, 二見繁美<sup>2</sup>, 足利敬一<sup>3</sup>, 柴田剛徳<sup>3</sup>  
<sup>1</sup>宮崎市郡医師会病院放射線技術科, <sup>2</sup>宮崎市郡医師会病院放射線科, <sup>3</sup>宮崎市郡医師会病院循環器内科

### M7-4 心房細動アブレーションの3D mapping systemにおける左房抽出時間短縮の検討

齋藤一樹<sup>1</sup>, 手代木大介<sup>1</sup>, 上野明彦<sup>2</sup>, 津田泰任<sup>2</sup>, 山崎継敬<sup>2</sup>, 村井 治<sup>2</sup>, 竹中 創<sup>3</sup>  
<sup>1</sup>川崎幸病院放射線科, <sup>2</sup>川崎幸病院循環器内科, <sup>3</sup>横浜総合病院ハートセンター循環器科

### M7-5 心房細動アブレーションにおけるPENTARAY NAV Catheterを用いたCT mergeの検討

柿本真司<sup>1</sup>, 三浦俊二<sup>1</sup>, 西岡真生<sup>1</sup>, 重元智志<sup>1</sup>, 西田健夫<sup>1</sup>, 福澄洋一<sup>1</sup>, 巷岡 聡<sup>2</sup>, 本郷 玄<sup>2</sup>, 野副純世<sup>2</sup>, 芹川 威<sup>2</sup>, 末松延裕<sup>2</sup>, 久保田徹<sup>2</sup>, 岡部真典<sup>2</sup>, 山本雄祐<sup>2</sup>  
<sup>1</sup>済生会福岡総合病院臨床工学科, <sup>2</sup>済生会福岡総合病院心臓血管・大動脈センター循環器内科

### M7-6 3D mapping装置における左房抽出にかかる時間を短縮のための工夫

芳森亜希子<sup>1</sup>, 浜 義之<sup>2</sup>, 中野僚哉<sup>1</sup>, 望月純也<sup>1</sup>, 夢田和弘<sup>1</sup>, 桑原大志<sup>3</sup>, 松戸裕治<sup>2</sup>, 山本雅史<sup>2</sup>, 氷見寿治<sup>2</sup>, 佐々木優二<sup>1</sup>  
<sup>1</sup>君津中央病院臨床工学科, <sup>2</sup>君津中央病院循環器科, <sup>3</sup>横須賀共済病院循環器内科



# Friday, 31 July

**Room 9** 11:50-12:50 Luncheon Seminar32 [LS32]

## **Anticoagulation in patients with AF undergoing catheter ablation: how to manage it? ★**

**Chair** Seiji Takatsuki

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

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### **LS32-1** What VENTURE-AF results tell us?

**Riccardo Cappato**

*The Arrhythmia and Electrophysiology Research Center, Humanitas Research Hospital, Italy*

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### **LS32-2** Investigation into better oral anticoagulation during catheter ablation procedure for Japanese atrial fibrillation patients

**Koichi Inoue**

*Cardiovascular Medicine, EP Laboratory and Arrhythmic Service, Sakurabashi Watanabe Hospital, Osaka, Japan*

*(Bayer Yakuhin, Ltd.)*

## AF Ablation 16

**Chairs Naoya Oketani**

*Department of Cardiovascular Medicine and Hypertension, Graduate School of Medical and Dental Sciences, Kagoshima University, Kagoshima, Japan*

**Yoshihide Takahashi**

*Department of Cardiology, NHO Disaster Medical Center, Tokyo, Japan*

### **O67-1 The relationship of the time-frequency power values of p wave between with and without atrial fibrillation patients**

**Daisuke Wakatsuki<sup>1</sup>, Masaaki Kurata<sup>1</sup>, Hisa Shimojima<sup>1</sup>, Taku Asano<sup>2</sup>, Mio Ebato<sup>1</sup>, Hiroshi Suzuki<sup>1</sup>**

*<sup>1</sup>Division of Cardiology, Showa University Fujigaoka Hospital, Kanagawa, Japan, <sup>2</sup>Showa University, Tokyo, Japan*

### **O67-2 Impact of left atrial CFAEs area on outcome of catheter ablation for non-paroxysmal atrial fibrillation**

**Tamotsu Sakamoto, Koichi Mizumaki, Naoya Kataoka, Yosuke Nakatani, Kunihiro Nishida, Hiroshi Inoue**

*The Second Department of Internal Medicine, University of Toyama, Toyama, Japan*

### **O67-3 Site with Repetitively Appearing Rotors Exhibits High Dominant Frequency (DF) in Atrial Fibrillation (AF): An Analysis with a Novel Phase Mapping System Called "ExTRa Mapping"**

**Akira Fukui<sup>1</sup>, Takeshi Tsuchiya<sup>1</sup>, Takanori Yamaguchi<sup>2</sup>, Yasutsugu Nagamoto<sup>3</sup>, Shin Inada<sup>4</sup>, Kazuo Nakazawa<sup>4</sup>, Takashi Ashihara<sup>5</sup>**

*<sup>1</sup>EP Expert Doctors-Team Tsuchiya, Kumamoto, Japan, <sup>2</sup>Department of Cardiology and Clinical Examination, Oita University, Oita, Japan, <sup>3</sup>Division of Cardiology, Saga-Ken Medical Centre Koseikan, Saga, Japan, <sup>4</sup>National Cerebral and Cardiovascular Center Research Institute, Osaka, Japan, <sup>5</sup>Department of Cardiovascular and Respiratory Medicine, Shiga university of Medical Science, Shiga, Japan*

### **O67-4 The Features and Implications of Autonomic Responses during Radiofrequency Energy Applications in Patients with Atrial Fibrillation**

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

### **O67-5 Impact of Complex Fractionated Atrial Electrograms and Low Voltage Areas on Identification of Atrial Fibrillation Sources**

**Yoshiyuki Hama<sup>1</sup>, Yuji Matsudo<sup>1</sup>, Taishi Kuwahara<sup>2</sup>, Noriko Eguchi<sup>1</sup>, Haruka Fujimaki<sup>1</sup>, Ikuto Terabayashi<sup>1</sup>, Kohei Kamishita<sup>1</sup>, Bi Katsu<sup>1</sup>, Shuzo Tanaka<sup>1</sup>, Norimasa Tonoike<sup>1</sup>, Kyokushi Hou<sup>1</sup>, Tai Sekine<sup>1</sup>, Masashi Yamamoto<sup>1</sup>, Toshiharu Himi<sup>1</sup>**

*<sup>1</sup>Division of Cardiology, Kimitsu Chuo Hospital, Chiba, Japan, <sup>2</sup>Cardiovascular Center, Yokosuka Kyousai Hospital, Kanagawa, Japan*

## AF Ablation 17

**Chairs** Koji Azegami

*Department of Cardiology, Shin-Yurigaoka General Hospital, Kanagawa, Japan*

Takaaki Matsuyama

*Department of Pathology, National Cerebral and Cardiovascular Center, Osaka, Japan*

### O68-1 Differential Effectiveness of Landiolol among Tachycardiac Atrial Fibrillation and Atrial Tachycardia/Flutter in Patients with Left Ventricular Dysfunction

Eiichiro Oka, Yu-ki Iwasaki, Yuhi Fujimoto, Kanako Hagiwara, Kenta Takahashi, Ippei Tsuboi, Hiroshi Hayashi, Kenji Yodogawa, Meiso Hayashi, Yasushi Miyauchi, Wataru Shimizu

*The Department of Cardiology, Nippon Medical School, Tokyo, Japan*

### O68-2 Assessment of the atrial fibrillation ablation outcome using the clinic ECG, monthly 24-h Holter ECG, and twice daily telemonitoring ECG

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*

### O68-3 Clinical profiles in patients with paroxysmal atrial fibrillation and heart failure during long-term antiarrhythmic drugs therapy

Yuki Matsumoto<sup>1</sup>, Takashi Komatsu<sup>2</sup>, Yoshihiro Sato<sup>2</sup>, Mahito Ozawa<sup>2</sup>, Fusanori Kunugita<sup>2</sup>, Reisuke Yoshizawa<sup>1</sup>, Yoshihiro Morino<sup>2</sup>, Motoyuki Nakamura<sup>1</sup>

*<sup>1</sup>Division of Cardiology, Department of Internal Medicine, Iwate Medical University, Iwate, Japan, <sup>2</sup>Division of Cardioangiology, Nephrology and Endocrinology, Department of Internal Medicine, Iwate Medical University, Iwate, Japan*

### O68-4 Dressler's syndrome following acute pericarditis after pulmonary vein isolation

Tatsuya Usui, Kentaro Shimada, Nobuyuki Totsuka, Izumi Miyazawa, Nobuyuki Urasawa, Takahiro Kobayashi, Tomoaki Mochidome, Daisuke Kashiwagi, Jiro Yoshioka

*Division of Cardiology, Nagano Red Cross Hospital, Nagano, Japan*

## AF Ablation 18

**Chairs** Yumie Matsui

*Department of Cardiology, Saiseikai Izuo Hospital, Osaka, Japan*

**Hitoshi Hachiya**

*Division of Cardiology, Cardiovascular Center, Tsuchiura Kyodo Hospital, Ibaraki, Japan*

### **O69-1 Perimitral atrial flutter eliminated by radiofrequency ablation within the coronary sinus after endocardial mitral isthmus zone isolation which was completed using the PentaRay catheter**

Takehito Sasaki, Shigeto Naito, Kohki Nakamura, Eri Goto, Kentaro Minami, Daisuke Kutsuzawa, Masahiro Nakano, Satoru Shimizu, Yoshiaki Yamaguchi, Toshiaki Yano, Koji Kumagi, Shigeru Oshima

*Division of Cardiology, Gunma Prefectural Cardiovascular Center, Gunma, Japan*

### **O69-2 Comparison of Voltage of Complex Fractionated Electrograms, Dominant Frequency Regions Derived from Local Bipolar Recordings during Atrial Fibrillation and Sinus Rhythm**

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

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

### **O69-3 The impact of CHA2DS2-VASc score on the tachycardia cycle length of cavotricuspid isthmus dependent atrial flutter**

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

*Division of Cardiology, Miyazaki Medical Association Hospital, Miyazaki, Japan*

### **O69-4 Factors Underlying the Development of Perimitral Atrial Flutter after Extensive Encircling Pulmonary Vein Isolation**

Masaki Ota, Yoshiaki Kaneko, Tadashi Nakajima, Tadanobu Irie, Takafumi Iijima, Masahiko Kurabayashi

*Department of Cardiovascular Medicine, Gunma University Hospital, Gunma, Japan*

# Friday, 31 July

**O69-5**

## **Comparison of Segmental Pulmonary Vein Antrum Isolation to Circumferential Pulmonary Vein Isolation~Importance of respiratory management~**

**Yoshiyuki Hama**<sup>1</sup>, Yuji Matsudo<sup>1</sup>, Taishi Kuwahara<sup>2</sup>, Noriko Eguchi<sup>1</sup>, Haruka Fujimaki<sup>1</sup>, Ikuto Terabayashi<sup>1</sup>, Kohei Kamishita<sup>1</sup>, Bi Katsu<sup>1</sup>, Shuzo Tanaka<sup>1</sup>, Norimasa Tonoike<sup>1</sup>, Kyokushi Hou<sup>1</sup>, Tai Sekine<sup>1</sup>, Masashi Yamamoto<sup>1</sup>, Toshiharu Himi<sup>1</sup>

<sup>1</sup>Division of Cardiology, Kimitsu Chuo Hospital, Chiba, Japan, <sup>2</sup>Cardiovascular Center, Yokosuka Kyouzai Hospital, Kanagawa, Japan

## AF Others 2

**Chairs** Yoshinari Goseki

*Department of Cardiology, Tokyo Medical University, Tokyo, Japan*

**Katsuaki Yokoyama**

*Department of Cardiology, Nihon University Hospital, Tokyo, Japan*

### O70-1 Comparison of Acute Atrial Fibrillation Recurrence and Inflammation between Radiofrequency and Cryoballoon Ablation

**Nobuaki Tanaka**, Koichi Inoue, Koji Tanaka, Yuuko Toyoshima, Takafumi Oka, Yoshiyuki Orihara, Katsuomi Iwakura, Kenshi Fujii

*Sakurabashi Watanabe Hospital, Cardiovascular Center, Osaka, Japan*

### O70-2 Withdrawn

### O70-3 The Relationship of AF Recurrence with Overlap between Epicardial Adipose Tissue and Circumferential Pulmonary Vein Isolation in Paroxysmal Atrial Fibrillation

**Koji Kumagai**, Masahiro Nakano, Yoshiaki Yamaguchi, Daisuke Kutsuzawa, Kentaro Minami, Manabu Shimizu, Toshiaki Yano, Takehito Sasaki, Kohki Nakamura, Shigeto Naito, Shigeru Oshima

*Division of Cardiology, Gunma Prefectural Cardiovascular Center, Gunma, Japan*

### O70-4 Left Atrial 3D Anatomical Mapping Using Three Different Directional Views of CARTOSOUND Can Easily Visualize Detailed Anatomy without CT Integration

**Miyako Igarashi**, Kenji Kuroki, Takeshi Machino, Yoshiaki Yui, Kojiro Ogawa, Yasutoshi Shinoda, Eikou Sai, Mitsuhiro Fukata, Keita Masuda, Ahmed Talib, Yukio Sekiguchi, Keisuke Kuga, Akihiko Nogami, Kazutaka Aonuma

*Cardiovascular Division, Faculty of Medicine, University of Tsukuba, Ibaraki, Japan*

### O70-5 Serial Transition of the Left Atrial Dimension after Radiofrequency Ablation for Atrial Fibrillation

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

*Department of Cardiovascular Medicine, Toho University Faculty of Medicine, Tokyo, Japan*

## Anticoagulant 5

**Chairs** Yuji Murakawa

*Department of Internal Medicine, Teikyo University Mizonouchi Hospital, Kanagawa, Japan*

**Eitaro Kodani**

*Department of Cardiology, Nippon Medical School Tama Nagayama Hospital, Tokyo, Japan*

### O71-1 Usefulness of risk scoring system excluding female gender from CHA2DS2-VASc in Japanese patients with non-valvular atrial fibrillation: A subanalysis of the J-RHYTHM Registry

Hirofumi Tomita<sup>1</sup>, Ken Okumura<sup>1</sup>, Hiroshi Inoue<sup>2</sup>, Hirotsugu Atarashi<sup>3</sup>, Takeshi Yamashita<sup>4</sup>, Hideki Origasa<sup>5</sup>, Eiki Tsushima<sup>6</sup>

*<sup>1</sup>Department of Cardiology, Hirosaki University Graduate School of Medicine, Aomori, Japan, <sup>2</sup>Second Department of Internal Medicine, University of Toyama School of Medicine, Toyama, Japan, <sup>3</sup>Department of Cardiology, Nippon Medical School Tama-Nagayama Hospital, Tokyo, Japan, <sup>4</sup>Cardiovascular Institute Hospital, Tokyo, Japan, <sup>5</sup>Division of Biostatistics and Clinical Epidemiology, University of Toyama School of Medicine, Toyama, Japan, <sup>6</sup>Department of Physical Therapy, Hirosaki University School of Health Science, Aomori, Japan*

### O71-2 Digitalis is not associated with an increased risk of mortality in Japanese patients with atrial fibrillation: From The Fushimi AF Registry

Hisashi Ogawa<sup>1</sup>, Masahiro Esato<sup>2</sup>, Yeong-Hwa Chun<sup>2</sup>, Hikari Tsuji<sup>4</sup>, Hiromichi Wada<sup>3</sup>, Koji Hasegawa<sup>3</sup>, Mitsuru Abe<sup>1</sup>, Masaharu Akao<sup>1</sup>

*<sup>1</sup>Department of Cardiology, National Hospital Organization Kyoto Medical Center, Kyoto, Japan, <sup>2</sup>Department of Arrhythmia, Ijinkai Takeda General Hospital, Kyoto, Japan, <sup>3</sup>Division of Translational Research, National Hospital Organization Kyoto Medical Center, Kyoto, Japan, <sup>4</sup>Tsuji Clinic, Kyoto, Japan*

### O71-3 Warfarin is most used anticoagulation drug currently: From the Saitama AF registry

Kanna Fujita, Yoshitaka Sugawara, Takeshi Mitsuhashi, Takekuni Hayashi, Tomio Umemoto, Hideo Fujita, Shin-ichi Momomura

*Cardiovascular Division, Saitama Medical Center, Jichi Medical University, Saitama, Japan*

### O71-4 Prediction of Stroke in Patients with Atrial Fibrillation by Electrocardiographic Characteristics

Rena Nakamura<sup>1</sup>, Munehiro Iiya<sup>1</sup>, Ryo Masuda<sup>1</sup>, Kuniaki Nakano<sup>1</sup>, Hiroshi Shimada<sup>1</sup>, Masato Shimizu<sup>1</sup>, Hiroyuki Fujii<sup>1</sup>, Noriyoshi Yamawake<sup>1</sup>, Mitsuhiro Nishizaki<sup>1</sup>, Harumizu Sakurada<sup>2</sup>, Masayasu Hiraoka<sup>3</sup>

*<sup>1</sup>Department of Cardiology, Yokohama Minami Kyosai Hospital, Kanagawa, Japan, <sup>2</sup>Tokyo Metropolitan Health and Medical Treatment Corporation Ohkubo Hospital, Tokyo, Japan, <sup>3</sup>Toride-Kitasoma Healthcare Center Medical Association Hospital, Ibaraki, Japan*

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**O71-5** Withdrawn



## Anticoagulant 6

**Chairs** Toshimasa Tosaka

*Department of Cardiology, Tokyo Rinkai Hospital, Tokyo, Japan*

**Shinobu Imai**

*Cardiology, Imai Clinic, Saitama, Japan*

### **O72-1 The efficacy of transesophageal echocardiography for the prevention of systemic embolization in the patients with atrial fibrillation taking Non-vitamin K antagonist oral anticoagulants**

**Yoko Ito**<sup>1</sup>, Kentaro Yoshida<sup>2</sup>, Akira Kimata<sup>2</sup>, Naoya Koda<sup>2</sup>, Daigo Hiraya<sup>2</sup>, Masako Misaki<sup>2</sup>, Kazutaka Aonuma<sup>1</sup>, Noriyuki Takeyasu<sup>1</sup>

*<sup>1</sup>Cardiovascular Division, Institute of Clinical Medicine, Graduate School of Comprehensive Human Sciences, University of Tsukuba, Ibaraki, Japan, <sup>2</sup>Division of Cardiovascular Medicine, Ibaraki Prefectural Central Hospital, Ibaraki, Japan*

### **O72-2 Measurement of the anticoagulant activity in patients under edoxaban therapy for non-valvular atrial fibrillation**

**Hiroyuki Osanai**, Tomohiro Masutomi, Tasuku Kuwayama, Sota Ishihama, Yusuke Sakamoto, Naoya Otaka, Teruhiro Sakaguchi, Yoshihito Nakashima, Hiroshi Asana, Masayoshi Ajioka, Kazuyoshi Sakai

*Division of Cardiology, Tosei General Hospital, Aichi, Japan*

### **O72-3 Interim report of Post-Marketing Surveillance on the Long-Term Use of dabigatran etexilate in Japanese patients with nonvalvular atrial fibrillation: The J-Dabigatran Surveillance**

**Hiroshi Inoue**<sup>1</sup>, Shinichiro Uchiyama<sup>2</sup>, Hirotsugu Atarashi<sup>3</sup>, Ken Okumura<sup>4</sup>, Yukihiro Koretsune<sup>5</sup>, Masahiro Yasaka<sup>6</sup>, Takeshi Yamashita<sup>7</sup>

*<sup>1</sup>Second Department of Internal Medicine, University of Toyama School of Medicine, Toyama, Japan, <sup>2</sup>Clinical Research Center for Medicine, International University of Health and Welfare, Tokyo, Japan, <sup>3</sup>Department of Cardiology, Nippon Medical School Tama-Nagayama Hospital, Tokyo, Japan, <sup>4</sup>Department of Cardiology, Hirosaki University Graduate School of Medicine, Aomori, Japan, <sup>5</sup>Institute for Clinical Research, Osaka National Hospital, Osaka, Japan, <sup>6</sup>Department of Cerebrovascular Medicine and Neurology, Clinical Research Institute, National Hospital Organization Kyushu Medical Center, Fukuoka, Japan, <sup>7</sup>The Cardiovascular Institute, Tokyo, Japan*

### **O72-4 A case of paroxysmal atrial fibrillation that lupus anticoagulant positive and activated partial thromboplastin time extended after Dabigatran discontinuation**

**Yoshimi Onishi**, Mitsuharu Kawamura, Yuya Nakamura, Akinori Ochi, Koichiro Inokuchi, Yuta Chiba, Yumi Munetsugu, 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*

O72-5

## The Adequate Dosage of Initial Heparin Administration During Atrial Fibrillation Ablation in Patients with Taking Non-Vitamin K Antagonist Oral Anticoagulants

**Hirosuke Yamaji**<sup>1</sup>, Shunichi Higashiya<sup>1</sup>, Hiroshi Kawamura<sup>2</sup>, Takashi Murakami<sup>2</sup>, Kazuyoshi Hina<sup>2</sup>

<sup>1</sup>Heart Rhythm Center, Okayama Heart Clinic, Okayama, Japan, <sup>2</sup>Cardiovascular Medicine, Okayama Heart Clinic, Okayama, Japan

# Friday, 31 July

**Room 10** 11:50-12:50 Luncheon Seminar33 [LS33]

## **Gastrointestinal endoscopy and anti-thrombotic agents in an aging society**

**Chair** Takanori Ikeda

*Department of Cardiovascular Medicine, Toho University Faculty of Medicine, Tokyo, Japan*

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**LS33-1** **Gastrointestinal endoscopy and anti-thrombotic agents in an aging society**

**Fuyuhiko Yamamura**

*Showa University Hospital Endoscopy Center, Tokyo, Japan*

*(Takeda Pharmaceutical Company Limited)*

## AF Clinical Study 4

**Chairs Naoya Tsuboi**

*Department of Cardiology, Chukyo Hospital, Aichi, Japan*

**Akira Sato**

*Department of Cardiology, Saitama Red Cross Hospital, Saitama, Japan*

### O73-1 Factors associated with periesophageal vagal nerve injury after pulmonary vein antrum isolation

**Akio Kuroi**, Makoto Araki, Noboru Ichihara, Takamitsu Takagi, Jin Iwasawa, Hiroaki Nakamura, Shinsuke Miyazaki, Hiroshi Taniguchi, Hitoshi Hachiya, Yoshito Iesaka

*Division of Cardiology, Cardiovascular Center, Tsuchiura Kyodo Hospital, Ibaraki, Japan*

### O73-2 Catheter Ablation for Atrial Fibrillation in Adult Patients with Atrial Septal Defect

**Yoshihito Hata**, Keitaro Isozaki, Takeshi Yamazaki, Kazuto Fujimoto, Takanari Fujii, Hideshi Tomita

*Cardiovascular Center, Showa University Northern Yokohama Hospital, Kanagawa, Japan*

### O73-3 A Case of Atrial Fibrillation Ablation with Local Capturing of Isolated Pulmonary Vein Sleeve from Distal Coronary Sinus Mimicking Pulmonary Vein Reconnection

**Osamu Inaba**<sup>1</sup>, Yasuteru Yamauchi<sup>1</sup>, Shu Yamashita<sup>1</sup>, Masahiro Sekigawa<sup>1</sup>, Tatsuhiko Hirao<sup>1</sup>, Junji Yamaguchi<sup>1</sup>, Takamasa Iwai<sup>1</sup>, Hirofumi Arai<sup>1</sup>, Satoshi Shoji<sup>1</sup>, Kandou Kawahatsu<sup>1</sup>, Ryouichi Miyazaki<sup>1</sup>, Tetsuo Yamaguchi<sup>1</sup>, Nobuhiro Hara<sup>1</sup>, Tomoyuki Umemoto<sup>1</sup>, Takamichi Miyamoto<sup>1</sup>, Toru Obayashi<sup>1</sup>, Kenzo Hirao<sup>2</sup>

<sup>1</sup>The Department of Cardiovascular Medicine, Musashino Red Cross Hospital, Tokyo, Japan, <sup>2</sup>Heart Rhythm Center, Tokyo Medical and Dental University, Tokyo, Japan

### O73-4 Efficacy of cardiac effusion monitoring by intracardiac echo during atrial fibrillation ablation complicated with cardiac tamponade

**Tatsuhiko Hirao**<sup>1</sup>, Yasuteru Yamauchi<sup>1</sup>, Osamu Inaba<sup>1</sup>, Shu Yamashita<sup>1</sup>, Masahiro Sekigawa<sup>1</sup>, Junji Yamaguchi<sup>1</sup>, Takamasa Iwai<sup>1</sup>, Hirofumi Arai<sup>1</sup>, Satoshi Shoji<sup>1</sup>, Kandou Kawahatsu<sup>1</sup>, Ryouichi Miyazaki<sup>1</sup>, Tetsuo Yamaguchi<sup>1</sup>, Nobuhiro Hara<sup>1</sup>, Tomoyuki Umemoto<sup>1</sup>, Takamichi Miyamoto<sup>1</sup>, Toru Obayashi<sup>1</sup>, Kenzo Hirao<sup>2</sup>

<sup>1</sup>The Department of Cardiology, Musashino Red Cross Hospital, Tokyo, Japan, <sup>2</sup>Heart Rhythm Center, Tokyo Medical and Dental University, Tokyo, Japan

### O73-5 A case of permanent sinus node dysfunction after catheter ablation of atrial fibrillation

**Tomomichi Suzuki**, Hiroyuki Kobayashi, Daizo Ishihara, Shigeki Kobayashi

*The Department of Cardiology, Inazawa Municipal Hospital, Aichi, Japan*

## Anticoagulant 7

**Chairs** Toshihiko Ohara

*Department of General Medicine, Nippon Medical School Hospital, Tokyo, Japan*

**Masahiro Ogawa**

*Department of Cardiology, Fukuoka University School of Medicine, Fukuoka, Japan*

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**O74-1 Impact of Vitamin K-antagonists treatment on the prognosis of atrial fibrillation patients with severe renal dysfunction: Analysis from Shinken Database**

**Takuto Arita**, Shinya Suzuki, Naoharu Yagi, Takayuki Otsuka, Koichi Sagara, Takeshi Yamashita

*Department of Cardiovascular Medicine, The Cardiovascular Institute, Tokyo, Japan*

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**O74-2 Predicting poor INR control amongst Japanese patients with atrial fibrillation taking warfarin: Impact of the SAMeTT2R2 score**

**Mayumi Yamamoto**<sup>1</sup>, Eiichi Watanabe<sup>1</sup>, Masayuki Koshikawa<sup>1</sup>, Tomohide Ichikawa<sup>1</sup>, Kentarou Okuda<sup>1</sup>, Yoshihiro Sobue<sup>1</sup>, Masahide Harada<sup>1</sup>, Gregory YH Lip<sup>2</sup>, Yukio Ozaki<sup>1</sup>

*<sup>1</sup>Department of Internal Medicine, Fujita Health University, Aichi, Japan, <sup>2</sup>University of Birmingham Centre for Cardiovascular Sciences City Hospital, Birmingham, UK*

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**O74-3 Differences between patients treated with NOACs and patients on uninterrupted warfarin in intraprocedural ACT during catheter ablation for atrial fibrillation**

**Akihiro Nakada**<sup>1</sup>, Seiji Fukamizu<sup>1</sup>, Kiyotaka Yoshida<sup>1</sup>, Satoshi Miyazawa<sup>1</sup>, Iwanari Kawamura<sup>1</sup>, Yuichi Moriyama<sup>1</sup>, Ken Arai<sup>1</sup>, Toshiki Kaihara<sup>1</sup>, Motohiro Asaki<sup>1</sup>, Takeshi Kitamura<sup>1</sup>, Rintaro Hojo<sup>1</sup>, Yuya Aoyama<sup>1</sup>, Kota Komiyama<sup>1</sup>, Tamotsu Tejima<sup>1</sup>, Harumizu Sakurada<sup>2</sup>, Mitsuhiro Nishizaki<sup>3</sup>, Masayasu Hiraoka<sup>4</sup>

*<sup>1</sup>Department of Cardiology, Tokyo Metropolitan Hiroo Hospital, Tokyo, Japan, <sup>2</sup>Department of Cardiology, Yokohama Minami Kyosai Hospital, Kanagawa, Japan, <sup>3</sup>Tokyo Metropolitan Health and Medical Treatment Corporation Ohkubo Hospital, Tokyo, Japan, <sup>4</sup>Toride Kitasohma Medical Center Hospital, Ibaraki, Japan*

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**O74-4 Withdrawn**

O74-5

## Is Discontinuation of Oral Anticoagulation after Successful Atrial Fibrillation Ablation Justified in Patients with a Low Risk of Embolic Events?

**Yoshihiro Ikai**, Itsuro Morishima, Hideyuki Tsuboi, Michitaka Uesugi, Yasuhiro Morita, Yosuke Inoue, Ruka Yoshida, Tappei Furuta, Toshiro Tomomatsu, Kazushi Terada, Naoki Shibata, Kazuhito Tsuzuki, Takahito Sone

*Department of Cardiology, Ogaki Municipal Hospital, Gifu, Japan*

## AF Ablation 19

**Chairs** Fumitaka Isobe

*Senri-Chuo Hospital, Osaka, Japan*

Yosuke Ishii

*Nippon Medical School, Tokyo, Japan*

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### O75-1 Our experience of catheter ablation for atrial tachyarrhythmia after Maze procedure

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

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

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### O75-2 Atrial Tachyarrhythmias After Surgical Maze Procedure - Characteristics and Outcomes of Catheter Ablation -

Daisuke Yoshimoto, Kohei Yamashiro, Kazuto Kujira, Mitsuaki Itoh, Yuichiro Sakamoto

*Department of Cardiology, Toyohashi Heart Center, Aichi, Japan*

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### O75-3 A Case of Atrial Tachycardia Originated from Posterior Wall of Left Atrium after Maze Procedure

Shingo Kujime, Sou Takenaka, Daisuke Iida, Motosu Ando, Naoki Saito, Yuzuru Yambe

*Department of Cardiology, Heart Center, Yokohama General Hospital, Kanagawa, Japan*

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### O75-4 A case of a successful catheter ablation of a postoperative atrial tachycardia after Mitral valve surgery and a MAZE IV

Toshimitsu Suga, Hiroshi Nasu, Kenji Kageshima

*Tottori Prefectural Central Hospital, Division of Cardiology, Tottori, Japan*

## AF Others 3

**Chairs Koichi Mizumaki**

*Clinical Research and Ethics Center, University of Toyama, Toyama, Japan*

**Takayuki Otsuka**

*The Department of Cardiology, The Cardiovascular Institute, Tokyo, Japan*

### **O76-1 P-wave duration after cavotricuspid isthmus catheter ablation is associated with left atrial diameter and right atrial conduction time**

**Hiroaki Watanabe**, Tomoyuki Kabutoya, Yasuhiro Yokoyama, Akihiro Satou, Tomonori Watanabe, Takahiro Komori, Yasushi Imai, Kazuomi Kario

*Division of Cardiovascular Medicine, Jichi Medical University School of Medicine, Tochigi, Japan*

### **O76-2 P-wave Morphology Criteria Predicting Right Superior Pulmonary Vein Origin Atrial Tachycardia -Comparing ECG during Sinus Rhythm-**

**Takamitsu Takagi**, Makoto Araki, Noboru Ichihara, Jin Iwasawa, Akio Kuroi, Hiroaki Nakamura, Shinsuke Miyazaki, Hiroshi Taniguchi, Hitoshi Hachiya, Yoshito Iesaka

*Division of Cardiology, Cardiovascular Center, Tsuchiura Kyodo Hospital, Ibaraki, Japan*

### **O76-3 Does left atrial electroanatomical remodeling involve the P-wave to left appendage time determined by noninvasive transthoracic echocardiography?**

**Yuichi Hori**, Shiro Nakahara, Naofumi Tsukada, Akiko Okano, Noritaka Toratani, Yoshihiko Sakai

*Department of Cardiology, Dokkyo Medical University Koshigaya Hospital, Saitama, Japan*

### **O76-4 New methods for reduction of noises and the changes in frequency profile during P wave in patients with atrial fibrillation after pulmonary vein isolation**

**Nami Takano**<sup>1</sup>, Takeshi Tsutsumi<sup>2</sup>, Haruhito Takano<sup>3</sup>, Takanobu Tomaru<sup>4</sup>, Toshiaki Nakajima<sup>1</sup>, Issei Komuro<sup>1</sup>

<sup>1</sup>Department of Cardiovascular Medicine, University of Tokyo, Tokyo, Japan, <sup>2</sup>Division of Cardiology, Eda Memorial Hospital, Kanagawa, Japan, <sup>3</sup>Takano Clinic, Tokyo, Japan, <sup>4</sup>Department of Clinical Physiology, Sakura Medical Center, Toho University, Chiba, Japan

### **O76-5 Assessment of P Wave Signal-Averaged ECG in Patients with Hypertension to Investigate the Preventive Effect of Eplerenone on Atrial Fibrillation**

**Masato Kawasaki**, Takahisa Yamada, Yoshio Furukawa, Tsutomu Kawai, Satoshi Takahashi, Masatake Fukunami

*Division of Cardiology, Osaka General Medical Center, Osaka, Japan*



## AF Others 4

**Chairs** Atsushi Iwasa

*Department of Cardiology, Shin-Tokyo Hospital, Chiba, Japan*

**Kazuaki Kitani**

*Department of Cardiology, Tenri Hospital, Nara, Japan*

### **O77-1 Safety and Efficacy of Catheter Ablation in Elderly Patients with Atrial Fibrillation**

**Kazuhito Tsuzuki**, Itsuro Morishima, Hideyuki Tsuboi, Michitaka Uesugi, Yasuhiro Morita, Yosuke Inoue, Ruka Yoshida, Tappei Furuta, Toshiro Tomomatsu, Kazushi Terada, Yoshihiro Ikai, Naoki Shibata, Takahito Sone

*Ogaki Municipal Hospital, Gifu, Japan*

### **O77-2 Clinical Significance of C-reactive Protein Transcardiac Extraction in Patients with Atrial Fibrillation**

**Keiji Inoue**, Akira Sakamoto, Kohei Kawamura, Toru Tanigaki, Koji Isodono, Yoshinori Tsubakimoto, Tomohiko Sakatani, Shinzo Kimura, Akiko Matsuo, Hiroshi Fujita

*Department of Cardiology, Kyoto Second Red Cross Hospital, Kyoto, Japan*

### **O77-3 The impact of smoking on prognosis of patients with atrial fibrillation: Analysis from Shinken Database 2004-2011**

**Shinya Suzuki**, Takayuki Otsuka, Takuto Arita, Naoharu Yagi, Koichi Sagara, Takeshi Yamashita

*Department of Cardiovascular Medicine, The Cardiovascular Institute, Tokyo, Japan*

### **O77-4 Is hyperuricemia a predictor of recurrent atrial fibrillation after catheter ablation?**

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

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

### **O77-5 Systemic Inflammation Contributes to Muscle Proteolysis and Weakness in Atrial Fibrillation**

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

*Department of Cardiology, Fujita Health University School of Medicine, Aichi, Japan*

## AF Heart Failure

**Chairs** Shinya Suzuki

*Department of Cardiovascular Medicine, The Cardiovascular Institute, Tokyo, Japan*

**Takeshi Sasaki**

*Heart Rhythm Center, Tokyo Medical and Dental University, Tokyo, Japan*

### **O78-1 Pre-procedural plasma atrial natriuretic peptide level might be a predictive factor for the maintenance of sinus rhythm after radiofrequency catheter ablation of atrial fibrillation**

**Satoshi Aita**, Kenji Kuroki, Miyako Igarashi, Yukio Sekiguchi, Akihiko Nogami, Kazutaka Aonuma

*Cardiovascular Division, Faculty of Medicine, University of Tsukuba, Ibaraki, Japan*

### **O78-2 Relationship between renal function and NTproBNP changes after the radiofrequency catheter ablation of atrial fibrillation**

**Yasuko Tanabe**, Yuichiro Kawamura, Eitaro Sugiyama, Naka Sakamoto, Kazumi Akasaka, Nobuyuki Sato, Naoyuki Hasebe

*Department of Internal Medicine, Cardiovascular, Respiratory and Neurology Division, Asahikawa Medical University, Hokkaido, Japan*

### **O78-3 The Efficacy of Atrial Fibrillation Ablation on the Cardiac Function in Patients with Depressed Ejection Fraction**

**Hiroki Konishi**, Koji Fukuzawa, Tomoyuki Nakanishi, Soichiro Yamashita, Akinori Matsumoto, Hirotochi Ichibori, Kiyohiro Hyogo, Hiroshi Imada, Akihiro Yoshida, Ken-ichi Hirata

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

### **O78-4 Efficacy of Atrial Fibrillation (AF) Ablation in Patients with Persistent AF, Left Ventricular Dysfunction and Symptomatic Heart Failure**

**Hirokazu Sato**, Tetsuo Yagi, Akihiko Ishida, Yoshiaki Mibiki, Yoshihiro Yamashina, Takashi Nakagawa, Eiji Sato, Juri Komatsu

*Sendai City Hospital, Miyagi, Japan*

### **O78-5 Clinical benefits of catheter ablation therapy for persistent atrial fibrillation accompanying systolic heart failure**

**Susumu Takase**, Yasushi Mukai, Shujiro Inoue, Tomomi Nagayama, Tetsuya Matoba, Akiko Chishaki, Kenji Sunagawa

*Department of Cardiovascular Medicine, Kyushu University Hospital, Fukuoka, Japan*

# Friday, 31 July

**Room 11** 11:50-12:50 Luncheon Seminar34 [LS34]

## Recent Progress of the Magnetic Catheter Maneuvering System (Epoch, Stereotaxis) ★

**Chair** Yoshito Iesaka

*Division of Cardiology, Cardiovascular Center, Tsuchiura Kyodo Hospital, Ibaraki, Japan*

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### **LS34-1** Evidence for Superior Tissue Contact and Lesion Creation with Stereotaxis Magnetic Navigation

**Pramesh Kovoor**

*Department of Cardiology, Westmead Hospital, Australia*

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### **LS34-2** RF Lesion Formation: Is Magnetic Navigation Effective and Can We Predict It?

**Hiroshi Nakagawa**

*Heart Rhythm Institute, University of Oklahoma Health Sciences Center, Oklahoma City, Oklahoma, USA*

*(HOKUSHIN MEDICAL CO., LTD.)*

## 医療技術等の費用対効果評価の方法と制度への応用

座長 松本万夫

公益財団法人東松山医師会東松山医師会病院／埼玉医科大学国際医療センター心臓内科

小林洋一

昭和大学医学部内科学講座循環器内科

ICS

### 医療技術等の費用対効果評価の方法と制度への応用

福田 敬

国立保健医療科学院・医療・福祉サービス研究部

## AF Clinical Study 5

**Chairs** Yoshimasa Murakami

*Department of Cardiology, Nagoya City East Medical Center, Aichi, Japan*

**Masaomi Kimura**

*Hirosaki University Graduate School of Medicine, Department of Hypertension Stroke Medicine, Aomori, Japan*

### **O79-1 Pulmonary vein isolation including septum, bottom, and left pulmonary vein ridge areas makes same outcome in paroxysmal and persistent atrial fibrillation within 1 year**

**Shinji Kaneko**, Ryuji Kubota, Taiki Ohashi, Masaya Fujita, Tomoaki Haga, Shingo Narita, Takahiro Kamihara, Kazutoshi Yamaguchi, Junya Suzuki, Noriyuki Suzuki, Masanori Shinoda

*Department of Cardiology, Toyota Kosei Hospital, Aichi, Japan*

### **O79-2 Left atrial reverse remodeling prevents recurrence of atrial fibrillation after catheter ablation of persistent atrial fibrillation**

**Yoshihiko Kagawa**, Eitaro Fujii, Satoshi Fujita, Masaaki Ito

*Department of Cardiology and Nephrology, Mie University Graduate School of Medicine, Mie, Japan*

### **O79-3 Impact of Postprocedural Antiarrhythmic Drug Therapy with Bepridil on Maintaining Sinus Rhythm after Catheter Ablation in Patients with Persistent Atrial Fibrillation**

**Takehito Kondo**, Junichiro Miake, Kazuyoshi Ogura, Masaru Kato, Kazuhiko Iitsuka, Kazuhiro Yamamoto

*Department of Cardiology, Tottori University Hospital, Tottori, Japan*

### **O79-4 No Efficacy of Antiarrhythmic Drugs during the First 3-months after Pulmonary Vein Isolation in Patients with Persistent Atrial Fibrillation**

**Sayako Hirose**, Koji Miyamoto, Mitsuru Wada, Ikutaro Nakajima, Kohei Ishibashi, Hideo Okamura, Takashi Noda, Takeshi Aiba, Shiro Kamakura, Kengo Kusano

*Division of Arrhythmia and Electrophysiology, Department of Cardiovascular Medicine, National Cerebral and Cardiovascular Center, Osaka, Japan*

## AF Ablation 20

**Chairs** Itsuro Morishima

*Department of Cardiology, Ogaki Municipal Hospital, Gifu, Japan*

**Shinsuke Miyazaki**

*Division of Cardiology, Cardiovascular Center, Tsuchiura Kyodo Hospital, Ibaraki, Japan*

### O80-1 **Non-contrast CT is enough to provide anatomical information for atrial fibrillation ablation**

**Hajime Imai**, Yasuhiro Ogawa, Seifuku Kyo, Yosuke Negishi, Yosuke Murase, Noriaki Otake, Hiroaki Sawada, Yoshihito Arao, Keisuke Sakakibara, Katsuhiko Kawaguchi

*Department of Cardiology, Komaki City Hospital, Aichi, Japan*

### O80-2 **The efficacy and safety of catheter ablation for atrial fibrillation using open irrigation catheter in patients on chronic hemodialysis**

**Yoshio Furukawa**, Takahisa Yamada, Masato Kawasaki, Tsutomu Kawai, Satoshi Takahashi, Masatake Fukunami

*Division of Cardiology, Osaka General Medical Center, Osaka, Japan*

### O80-3 **The outcomes of the hybrid therapy combined with pulmonary vein isolation and amiodarone in hemodialysis patients with paroxysmal atrial fibrillation**

**Sari Imamura**, Kazuaki Kaitani, Maiko Kuroda, Yusuke Yoshikawa, Yukiko Hayama, Naoaki Onishi, Chisato Izumi, Yoshihisa Nakagawa

*Department of Cardiology, Tenri Hospital, Nara, Japan*

### O80-4 **The impact of non-contrast-enhanced magnetic resonance image integration into an electroanatomic mapping system on catheter ablation of paroxysmal atrial fibrillation**

**Kiminobu Yokoi**, Katsunori Okajima, Misato Chimura, Kosuke Aoki, Jin Teranishi, Kunihiro Kiuchi, Akira Shimane, Shinichiro Yamada, Yasuyo Taniguchi, Yoshinori Yasaka, Hiroya Kawai

*The Department of Cardiology, Hyogo Prefectural Himeji Cardiovascular Center, Hyogo, Japan*

### O80-5 **Albuminuria in patients with atrial fibrillation is associated with persistent form of atrial fibrillation**

**Yutaka Take**, Kimikazu Banba, Kensuke Matsumoto, Minako Ohara, Akihiro Hayashida, Tohru Ohe

*Department of Cardiovascular Medicine, The Sakakibara Heart Institute of Okayama, Okayama, Japan*

## AF 12

**Chairs** Kaoru Okishige

*Heart Center, Yokohama-City Bay Red Cross Hospital, Kanagawa, Japan*

Koichi Inoue

*Cardiovascular Center, Sakurabashi Watanabe Hospital, Osaka, Japan*

### **P24-1 Soluble fibrin monomer complex(SFMC) as a sensitive marker of possible hyper-coagulability after ablation for atrial fibrillation**

Toshikazu Funazaki, Satoru Komura, Takayuki Tanaka, Akimitsu Nasuno, Yutaka Terajima, Akiko Ueno, Risako Nakao, Atsushi Takagi, Naoki Naito

*Department of Cardiovascular Medicine, Saiseikai Kawaguchi General Hospital, Saitama, Japan*

### **P24-2 Effectiveness of Autonomic Nervous Activity by Pulmonary Vein Isolation for Atrial Fibrillation; Spectral Analysis of Heart Rate Variability Changes During Ablation by Holter Electrocardiogram**

Kentaro Nakamura<sup>1</sup>, Kyouichi Sudoh<sup>1</sup>, Fumio Suzuki<sup>2</sup>, Keisuke Ueda<sup>1</sup>, Takashi Nakagawa<sup>1</sup>, Yuuji Kasaoka<sup>1</sup>, Atsuko Abe<sup>1</sup>

*<sup>1</sup>The Cardiovascular Medical and Surgical Center, Shinyamanote Hospital, Tokyo, Japan, <sup>2</sup>Fukujuji Hospital, Cardiology, Tokyo, Japan*

### **P24-3 The characteristics of the prevalence of non-PV foci after isolation for posterior wall of left atrium in the patients with long-standing persistent atrial fibrillation**

Yukihiro Inamura<sup>1</sup>, Junichi Nitta<sup>1</sup>, Yosuke Hayashi<sup>1</sup>, Yoshikazu Sato<sup>1</sup>, Keita Watanabe<sup>1</sup>, Masahito Suzuki<sup>1</sup>, Ken Negi<sup>1</sup>, Tatsuya Hayashi<sup>1</sup>, Akira Sato<sup>1</sup>, Tsunehiro Yamato<sup>1</sup>, Yutaka Matsumura<sup>1</sup>, Kihiro Asakawa<sup>1</sup>, Masahiko Goya<sup>2</sup>, Kenzo Hirao<sup>2</sup>

*<sup>1</sup>Department of Cardiology, Saitama Red Cross Hospital, Saitama, Japan, <sup>2</sup>Heart Rhythm Center, Tokyo Medical and Dental University, Tokyo, Japan*

### **P24-4 Electrocardiographic PR prolongation predicts the outcome of pulmonary vein isolation in patients with paroxysmal atrial fibrillation**

Yuki Osaka<sup>1</sup>, Yuichi Ono<sup>1</sup>, Sawako Yada<sup>1</sup>, Taku Fukushima<sup>1</sup>, Kenji Koura<sup>1</sup>, Toru Miyazaki<sup>1</sup>, Tomoko Manno<sup>1</sup>, Ken Kurihara<sup>1</sup>, Shigeo Shimizu<sup>1</sup>, Kenichiro Otomo<sup>1</sup>, Kenzo Hirao<sup>2</sup>, Mitsuaki Isobe<sup>3</sup>

*<sup>1</sup>Department of Cardiology, Ome Municipal General Hospital, Tokyo, Japan, <sup>2</sup>Heart Rhythm Center, Tokyo Medical and Dental University, Tokyo, Japan, <sup>3</sup>Department of Cardiovascular Medicine, Tokyo Medical and Dental University, Tokyo, Japan*

**P24-5**

## **Stroke Prevention and Management of Atrial Fibrillation with Box Isolation on Chronic Hemodialysis Patients**

**Yoshinori Nakamura, Hiroshi Sohara, Yoshio Yamaguchi, Minoru Ihara, Satoshi Higuchi, Shutaro Satake**

*The Heart Rhythm Center, Hayama Heart Center, Kanagawa, Japan*



## AF 13

**Chairs** Shigeru Ikeguchi

*Department of Cardiology, Shiga Medical Center for Adults, Shiga, Japan*

**Mahito Noro**

*Department of Cardiology, Toho University Ohashi Hospital, Tokyo, Japan*

### P25-1

#### The efficacy of PLSVC isolation in a case of atrial fibrillation recurrence after PV isolation

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

*The Department of Cardiovascular Medicine, Kyushu University, Fukuoka, Japan*

### P25-2

#### A case of atrial fibrillation in a patient of partial anomalous pulmonary venous return

Tamami Nakagawa, Satoru Sakagami, Takahiro Saeki, Akio Chikata

*Department of Cardiology, Kanazawa Medical Center, Ishikawa, Japan*

### P25-3

#### The importance of the electrode-tissue contact force information to identify the ganglionated plexus sites in the patients of atrial fibrillation

Yasuhito Kubochi<sup>1</sup>, Katsuaki Yokoyama<sup>1</sup>, Kei Nishikawa<sup>1</sup>, Masakazu Komoriya<sup>1</sup>, Mitsunobu Enomoto<sup>1</sup>, Hidehito Takase<sup>1</sup>, Kagari Matsudaira<sup>1</sup>, Keiichi Sugiono<sup>1</sup>, Naoya Matsumoto<sup>1</sup>, Atsushi Hirayama<sup>2</sup>

*<sup>1</sup>Department of Cardiology, Nihon University Hospital, Tokyo, Japan, <sup>2</sup>Division of Cardiology, Department of Medicine, Nihon University School of Medicine, Tokyo, Japan*

### P25-4

#### A case of successful CTI ablation with a cooling effect due to the well-perfused RCA

Takahiro Kamihara, Shinji Kaneko, Kazutoshi Yamaguchi, Shingo Narita, Masaya Fujita, Taiki Ohashi, Ryuji Kubota, Masanori Shinoda

*The Department of Cardiology, Toyota Kosei Hospital, Aichi, Japan*

### P25-5

#### Warfarin-related nephropathy occurred during anticoagulation therapy with dabigatran

Tae Ishikawa<sup>1</sup>, Koji Azegami<sup>1</sup>, Keita Handa<sup>1</sup>, Kazuya Murata<sup>1</sup>, Yoshimitsu Otsuka<sup>1</sup>, Shingo Watanabe<sup>1</sup>, Kaoru Sakurai<sup>1</sup>, Michiya Shinozaki<sup>2</sup>, Kenzo Hirao<sup>3</sup>, Mitsuaki Isobe<sup>4</sup>

*<sup>1</sup>Department of Cardiovascular Medicine, Shin-yurigaoka General Hospital, Kanagawa, Japan, <sup>2</sup>Department of Nephrology, Shin-yurigaoka General Hospital, Kanagawa, Japan, <sup>3</sup>Heart Rhythm Center, Tokyo Medical and Dental University, Tokyo, Japan, <sup>4</sup>Department of Cardiovascular Medicine, Tokyo Medical and Dental University, Tokyo, Japan*

## SVT 2

**Chairs Junichi Nitta***Department of Cardiovascular Medicine, Saitama Red Cross Hospital, Saitama, Japan***Takashi Komatsu***Division of Cardiology, Department of Internal Medicine, Iwate Medical University, Iwate, Japan***P26-1****Common & uncommon AVNRT treated by CSOS-TV liner ablation without any junctional escape rhythm****Kenji Enta**, Masayuki Gotou, Kazuki Tanaka, Asako Kumagai, Koji Inoue, Hiroshi Koganei, Masato Ootsuka, Yasuhiro Ishii*Ogikubo Hospital, Tokyo, Japan***P26-2****A success case that ablated left post-septum accessory pathway with decremental conduction properties****Kei Yamashiro**<sup>1</sup>, Tatsushi Shinzato<sup>2</sup>, Hiroyuki Tokiwa<sup>1</sup>, Genri Numata<sup>1</sup>, Hiroshi Matsunaga<sup>1</sup>, Toru Tamaki<sup>1</sup>, Akihito Kosaka<sup>1</sup>, Tetsuya Saito<sup>1</sup>, Akiko Ishihara<sup>1</sup>, Yoshiro Kamoi<sup>1</sup>, Takahiro Tanaka<sup>1</sup><sup>1</sup>Department of Cardiology Cardiovascular Center, Showa General Hospital, Tokyo, Japan, <sup>2</sup>Department of Cardiology, Shonan Hospital, Kanagawa, Japan**P26-3****Successful Slow Pathway Ablation without Junctional Beats in a Patients with Persistent Left Superior Vena Cava****Satoshi Shoji**<sup>1</sup>, Yasuteru Yamauchi<sup>1</sup>, Osamu Inaba<sup>1</sup>, Junji Yamaguchi<sup>1</sup>, Takamasa Iwai<sup>1</sup>, Hirofumi Arai<sup>1</sup>, Kandou Kawahatsu<sup>1</sup>, Tatsuhiko Hirai<sup>1</sup>, Ryouichi Miyazaki<sup>1</sup>, Shu Yamashita<sup>1</sup>, Masahiro Sekigawa<sup>1</sup>, Tetsuo Yamaguchi<sup>1</sup>, Nobuhiro Hara<sup>1</sup>, Tomoyuki Umemoto<sup>1</sup>, Takamichi Miyamoto<sup>1</sup>, Toru Obayashi<sup>1</sup>, Kenzo Hirao<sup>2</sup><sup>1</sup>Department of Cardiology, Musashino Red Cross Hospital, Tokyo, Japan, <sup>2</sup>Heart Rhythm Center, Tokyo Medical and Dental University, Tokyo, Japan**P26-4****A one-month boy of virus myocarditis by Coxsackievirus B3 presented 2 kinds of paroxysmal supraventricular tachycardia****Shuhei Fujita**, Tatsuya Kubo, Kiyoshi Hatasaki*Department of Pediatrics, Toyama Prefectural Central Hospital, Toyama, Japan***P26-5****Hidden complete AV block after failed WPW syndrome ablation****Jun Yoshimoto**, Sung-Hae Kim, Norie Mitsushita, Masaki Nii, Yasuo Ono*Department of Cardiology, Shizuoka Children's Hospital, Shizuoka, Japan*

## AF 14

**Chairs** Shiro Nakahara

*Department of Cardiology, Dokkyo University Koshigaya Hospital, Saitama, Japan*

Kojiro Tanimoto

*Department of Cardiology, NHO Tokyo Medical Center, Tokyo, Japan*

### P27-1

#### **A case developing coronary artery spasm during pulmonary vein isolation, who are coexisted with isolated adrenocorticotrophic hormone deficiency**

Osamu Wakisaka<sup>1</sup>, Tatsuhiko Ooie<sup>1</sup>, Miho Haraguchi<sup>1</sup>, Shozo Yamasue<sup>1</sup>, Masaya Arikawa<sup>1</sup>, Naohiko Takahashi<sup>2</sup>

*<sup>1</sup>Oita Medical Center, Oita, Japan, <sup>2</sup>Department of Cardiology and Clinical Examination, Faculty of Medicine, Oita University, Oita, Japan*

### P27-2

#### **A case report of a cerebral infarction during anticoagulation bridging with atrial fibrillation**

Masanori Yabuki, Shinya Nagayama, Yorihiro Higashino, Satoru Otsuji, Shin Takiuchi, Katsuaki Asano, Motoaki Ibuki, Katsuyuki Hasegawa, Toshikazu Kashiya, Daisuke Shishikura, Kasumi Ishibuchi, Akiko Fujino, Rui Ishii

*Higashi Takarazuka Satoh Hospital, Cardiovascular Division, Hyogo, Japan*

### P27-3

#### **Hybrid Therapy of Amiodarone and Pulmonary Vein Isolation against Tachycardia-induced Cardiomyopathy Caused by Atrial Fibrillation**

Makoto Nakano, Koji Fukuda, Masateru Kondo, Masato Segawa, Michinori Hirano, Takahiko Chiba, Hiroaki Shimokawa

*Department of Cardiovascular Medicine, Tohoku University Graduate School of Medicine, Miyagi, Japan*

### P27-4

#### **Disconnection of the left inferior pulmonary vein eliminates long-standing, symptomatic atrial premature contractions: A case report**

Naoki Amaya, Kenichi Kaseno, Kaori Hisazaki, Daisetsu Aoyama, Yuichiro Shiomi, Kanae Hasegawa, Hiroyuki Ikeda, Naoto Tama, Yoshitomo Fukuoka, Tetsuji Morishita, Takehiko Sato, Kentaro Ishida, Kenichiro Arakawa, Hiroyasu Uzui, Jong-dae Lee, Hiroshi Tada

*Department of Cardiovascular Medicine, University of Fukui Hospital, Fukui, Japan*

**P27-5**

**Nifekalant with Rapid Ventricular Pacing Suppressed Incessant Ventricular Tachycardia after Urgent Coronary Artery Bypass Surgery in the Patient with Acute Myocardial Infarction**

**Hironori Nakamura**<sup>1</sup>, Hidehira Fukaya<sup>1</sup>, Shinichi Niwano<sup>1</sup>, Yuta Ono<sup>1</sup>, Takuya Hashimoto<sup>1</sup>, Tazuru Igarashi<sup>1</sup>, Tamami Fujiishi<sup>1</sup>, Naruya Ishizue<sup>1</sup>, Tomoharu Yoshizawa<sup>1</sup>, Jun Kishihara<sup>1</sup>, Masami Murakami<sup>1</sup>, Tomohiro Mizutani<sup>1</sup>, Ichiro Takeuchi<sup>2</sup>, Tadashi Kitamura<sup>3</sup>, Kagami Miyaji<sup>3</sup>, Junya Ako<sup>1</sup>

<sup>1</sup>Department of Cardiovascular Medicine, Kitasato University School of Medicine, Kanagawa, Japan, <sup>2</sup>Department of Emergency and Disaster Medicine, Kitasato University School of Medicine, Kanagawa, Japan, <sup>3</sup>Department of Cardiovascular Surgery, Kitasato University School of Medicine, Kanagawa, Japan

## Ion Channel 2★

**Chairs Naomasa Makita**

*Department of Molecular Physiology, Nagasaki University Graduate School of Biomedical Sciences, Nagasaki, Japan*

**Yoshiyasu Aizawa**

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

### **P28-1 Generation of the *TRPM4* knock out human induced pluripotent stem cells by genome editing using the CRISPR-Cas9 nickase**

**Yuta Yamamoto<sup>1</sup>, Takeru Makiyama<sup>1</sup>, Kenichi Sasaki<sup>1</sup>, Mamoru Hayano<sup>1</sup>, Takeshi Harita<sup>1</sup>, Suguru Nishiuchi<sup>1</sup>, Jiarong Chen<sup>1</sup>, Yimin Wuriyanghai<sup>1</sup>, Hirohiko Kohjitani<sup>1</sup>, Tsukasa Kamakura<sup>1</sup>, Yoshinori Yoshida<sup>2</sup>, Seiko Ohno<sup>3</sup>, Minoru Horie<sup>3</sup>, Takeshi Kimura<sup>1</sup>**

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### **P28-2 Suppressive Effect of Flecainide on T-Wave Alternans in Andersen-Tawil Syndrome**

**Hideki Hayashi, Shoko Shimizu, Seiko Ohno, Minoru Horie**

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### **P28-3 Transcriptome profile of mouse sinoatrial node**

**Yosuke Okamoto<sup>1</sup>, Kirill V. Tarasov<sup>1</sup>, Yelena S. Tarasova<sup>1</sup>, Bruce D. Ziman<sup>1</sup>, Joohne Lee<sup>1</sup>, Edward G. Lakatta<sup>1</sup>, Manabu Murakami<sup>2</sup>**

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### **P28-4 ML277 shortens prolonged action potential durations in a patient-specific induced pluripotent stem cell-based model of long-QT syndrome type 1**

**Yimin Wuriyanghai<sup>1</sup>, Takeru Makiyama<sup>1</sup>, Kenichi Sasaki<sup>1</sup>, Tsukasa Kamakura<sup>1</sup>, Jiarong Chen<sup>1</sup>, Mamoru Hayano<sup>1</sup>, Yuta Yamamoto<sup>1</sup>, Takeshi Harita<sup>1</sup>, Suguru Nishiuchi<sup>1</sup>, Hirohiko Kohjitani<sup>1</sup>, Seiko Ohno<sup>2</sup>, Ken Watanabe<sup>3</sup>, Takeshi Kimura<sup>1</sup>, Minoru Horie<sup>2</sup>**

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### **P28-5 Prominent regionally-independent dynamics of T-wave alternans in a patient with type 3 long QT syndrome**

**Nobuhiro Takasugi<sup>1</sup>, Hiroko Goto<sup>2</sup>, Takashi Kuwahara<sup>2</sup>, Takashi Nakashima<sup>1</sup>, Tomoki Kubota<sup>1</sup>, Kazuhiko Nishigaki<sup>1</sup>, Shinya Minatoguchi<sup>1</sup>**

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**P28-6**

## **Cardiac Sodium Channel Mutation Associated with Epinephrine-Induced QT Prolongation and Sinus Node Dysfunction**

**Jiarong Chen<sup>1</sup>, Takeru Makiyama<sup>1</sup>, Yimin Wuriyanghai<sup>2</sup>, Seiko Ohno<sup>2</sup>, Kenichi Sasaki<sup>1</sup>, Mamoru Hayano<sup>1</sup>, Takeshi Harita<sup>1</sup>, Suguru Nishiuchi<sup>1</sup>, Yuta Yamamoto<sup>1</sup>, Takeshi Ueyama<sup>3</sup>, Akihiko Shimizu<sup>3</sup>, Minoru Horie<sup>2</sup>, Takeshi Kimura<sup>1</sup>**

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## AF 15

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Yoshifumi Okano

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### **P29-1 Opposite activation of the coronary sinus and inferior left atrium during left atrial appendage pacing after mitral isthmus linear ablation**

Hisashi Murakami, Tomoyuki Shibata, Naoki Tsurumi, Masahiro Yoshida, Hiroki Kojima, Shuro Riku, Takuya Okada, Kenji Kada, Naoya Tsuboi

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### **P29-2 Pulmonary vein tachycardia after pulmonary vein isolation for persistent atrial fibrillation in a young patient with dilated right atrium following surgery of congenital heart disease**

Gaku Izumi<sup>1</sup>, Hisashi Yokoshiki<sup>2</sup>, Hirofumi Mitsuyama<sup>2</sup>, Kazuya Mizukami<sup>2</sup>, Taro Tenma<sup>2</sup>, Takuo Furukawa<sup>1</sup>, Kouta Takei<sup>1</sup>, Hirokuni Yamazawa<sup>1</sup>, Atsuhito Takeda<sup>1</sup>

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### **P29-3 Rebound of coagulation activity?: Two cerebral infarction cases with atrial fibrillation during anticoagulation interruptions**

Masanori Yabuki, Shinya Nagayama, Yorihiro Higashino, Satoru Otsuji, Shin Takiuchi, Katsuaki Asano, Motoaki Ibuki, Katsuyuki Hasegawa, Toshikazu Kashiya, Daisuke Shishikura, Kasumi Ishibuchi, Akiko Fujino, Rui Ishii

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### **P29-4 A Case with a Stable Rotor Observed During Atrial Fibrillation Using a Novel Phase Mapping System Called "ExTRa Mapping"**

Akira Fukui<sup>1</sup>, Takeshi Tsuchiya<sup>1</sup>, Takanori Yamaguchi<sup>2</sup>, Yasutsugu Nagamoto<sup>3</sup>, Shin Inada<sup>4</sup>, Kazuo Nakazawa<sup>4</sup>, Takashi Ashihara<sup>5</sup>

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### **P29-5 Cryoballoon ablation for paroxysmal atrial fibrillation in patient with a common trunk of the left pulmonary veins**

Hiroaki Sugiyama<sup>1</sup>, Satoshi Shizuta<sup>1</sup>, Hidehito Hamaguchi<sup>2</sup>, Tetsuma Kawaji<sup>1</sup>, Kentaro Nakai<sup>1</sup>, Takeru Makiyama<sup>1</sup>, Wataru Ono<sup>1</sup>, Takeshi Kimura<sup>1</sup>

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**P29-6**

## **Hybrid thoracoscopic and catheter ablation for treatment of refractory long-standing persistent atrial fibrillation: A case report**

**Satoshi Miyazawa**<sup>1</sup>, Seiji Fukamizu<sup>1</sup>, Kiyotaka Yoshida<sup>1</sup>, Iwanari Kawamura<sup>1</sup>, Akihiro Nakada<sup>1</sup>, Yuichi Moriyama<sup>1</sup>, Ken Arai<sup>1</sup>, Toshiki Kaihara<sup>1</sup>, Motohiro Asaki<sup>1</sup>, Takeshi Kitamura<sup>1</sup>, Rintaro Hojo<sup>1</sup>, Yuya Aoyama<sup>1</sup>, Kota Komiyama<sup>1</sup>, Tamotsu Tejima<sup>1</sup>, Mitsuhiro Nishizaki<sup>2</sup>, Harumizu Sakurada<sup>3</sup>, Masayasu Hiraoka<sup>4</sup>

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## AF 16

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### P30-1 The analysis of dominant frequency and regularity index for clinical outcome of catheter ablation to atrial fibrillation

Yoshiaki Mizutani, Yasuya Inden, Tadahiro Itou, Tomoyuki Nagao, Satoshi Okumura, Hiroyuki Katou, Satoshi Yanagisawa, Shinji Ishikawa, Naoki Yoshida, Makoto Hirai, Toyoaki Murohara

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### P30-2 Importance of Additional Left Atrial Roof Linear Ablation for Fixed Atrial Fibrillation: The Role of LA Roof for AF Maintenance

Naoki Saito, Sou Takenaka, Daisuke Iida, Motosu Ando, Shingo Kujime, Yuzuru Yambe

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### P30-3 Echocardiographic Evaluation of Fat Pad Behind Left Atrium and Its Spatial Relationship to Electrically Determining Ganglionated Plexi

Takayuki Iida, Norishige Morita, Tadashi Hashida, Daisuke Fujibayashi, Akia Ueno, Yoshinori Kobayashi

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### P30-4 Clinical Effects of Eicosapentaenoic Acid on the Prevention of Atrial Fibrillation Recurrence after Pulmonary Vein Isolation

Hideshi Aoyagi, Kaoru Okishige, Kentaro Goto, Mitsumi Yamashita, Naohiko Kawaguchi, Nobutaka Kato, Mitsutoshi Asano, Tomofumi Nakamura, Hidetoshi Suzuki, Tsukasa Shimura, Manabu Kurabayashi

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### P30-5 Gender Differences in Risk Factors for Atrial Fibrillation

Nobue Yagihara<sup>1</sup>, Hiroshi Watanabe<sup>1</sup>, Toru Watanabe<sup>3</sup>, Yoshifusa Aizawa<sup>2</sup>, Tohru Minamino<sup>1</sup>

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**P30-6**

**Novel Cardiac CryoAblation Catheter for Cavotricuspid Isthmus Ablation**

**Kenichi Tokutake**, Michifumi Tokuda, Kenichi Yokoyama, Ryohsuke Narui, Mika Hioki, Shin-ichi Tanigawa, Michifumi Tokuda, Keiichi Inada, Seiichiro Matsuo, Michihiro Yoshimura, Teiichi Yamane

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## Devices 4

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**Takeshi Yamakawa**

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### **P31-1 Efficacy and Safety of the Wearable Cardioverter Defibrillator (WCD) After Removal of Implantable Cardioverter Defibrillator (ICD)**

Yasuhiro Shirai<sup>1</sup>, Masahiko Goya<sup>1</sup>, Takuro Nishimura<sup>1</sup>, Koji Sugiyama<sup>1</sup>, Susumu Tao<sup>1</sup>, Takeshi Sasaki<sup>1</sup>, Mihoko Kawabata<sup>1</sup>, Tetsuo Sasano<sup>1</sup>, Mitsuaki Isobe<sup>2</sup>, Kenzo Hirao<sup>1</sup>

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### **P31-2 Internal jugular vein thrombosis with lateral neck swelling secondary to a pacemaker implantation**

Kosuke Fujibayashi, Yuushi Yasuda, Eiichi Ueno, Shintaro Takano, Nakaba Fujioka, Yasuyuki Kawai, Michihiko Kitayama, Kouji Kajinami

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### **P31-3 Difference of implantation pacemaker between MRI-conditional systems and Conventional systems**

Satoshi Tsujioka, Masatsugu Nozoe

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### **P31-4 The Existence of High Defibrillation Threshold Indicates the Incidence of Pneumothorax during Cardiac Resynchronization Therapy Defibrillator Implantation**

Masashi Kamioka, Hitoshi Suzuki, Minoru Nodera, Takashi Kaneshiro, Yoshiyuki Kamiyama, Yasuchika Takeishi

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### **P31-5 Usefulness of low-energy defibrillation test in patients with implantable cardioverter defibrillator**

Daisuke Ishigaki, Takanori Arimoto, Daisuke Kutsuzawa, Yu Kumagai, Naoaki Hashimoto, Tadateru Iwayama, Joji Nitobe, Tetsu Watanabe, Isao Kubota

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## VT 4

**Chairs Kazuo Kato**

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### **P32-1 Transient appearance of a giant thrombus within a localized ventricular aneurysm: A rare complication of radiofrequency catheter ablation (RFCA)**

**Kanae Hasegawa**, Kenichi Kaseno, Machiko Miyoshi, Kaori Hisazaki, Naoki Amaya, Daisetsu Aoyama, Naoto Tama, Etsuko Ikeda, Hiroyuki Ikeda, Takehiko Sato, Yoshitomo Fukuoka, Tetsuji Morishita, Kentaro Ishida, Hiroyasu Uzui, Hiroshi Tada

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### **P32-2 Idiopathic ventricular contractions originating from right bundle branch**

**Osamu Hashimoto**, Yoshihisa Enjoji, Yumi Shimura, Joji Hosokawa

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### **P32-3 The Prognostic Factor of Death and Recurrent Ventricular Tachyarrhythmia in Patients with Arrhythmogenic Right Ventricular Cardiomyopathy**

**Akihito Miyoshi**, Satoshi Nagase, Motoki Kubo, Koji Nakagawa, Nobuhiro Nishii, Hiroshi Morita, Kazufumi Nakamura, Hiroshi Ito

*Department of Cardiovascular Medicine, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama, Japan*

### **P32-4 Septum origin OMI-VT that ablation from the left ventricle side and the right ventricle side was effective**

**Hisato Moritani**, Masaki Tabuchi

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### **P32-5 Long-term outcome of the patients with and without structural heart disease: Impact of VT/VF induction on appropriate ICD therapy**

**Eikou Sai**, Miyako Igarashi, Yasutoshi Shinoda, Kojiro Ogawa, Mitsuhiro Fukata, Ahmed Talib, Keita Masuda, Yoshiaki Yui, Takeshi Machino, Kenji Kuroki, Yukio Sekiguchi, Akihiko Nogami, Kazutaka Aonuma

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## アブレーション2 (メディカルプロフェッショナル)

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奥山裕司

大阪大学大学院医学系研究科 先進心血管治療学寄附講座

### MP5-1 CARTO System によるActivation mapping時の簡易的な電位の時相再解析方法の発見

堺 美郎<sup>1</sup>, 本田俊弘<sup>2</sup>, 古山准二郎<sup>2</sup>, 田中靖章<sup>2</sup>, 劔 卓夫<sup>2</sup>, 岡松秀治<sup>2</sup>, 米村友秀<sup>1</sup>, 清田由佳里<sup>1</sup>  
<sup>1</sup>済生会熊本病院臨床工学部, <sup>2</sup>済生会熊本病院循環器内科

### MP5-2 心房細動アブレーションにおける多極電極カテーテルPENTARAY® NAVの有用性

永森信啓<sup>1</sup>, 堀内芳美<sup>1</sup>, 佐久間貴大<sup>1</sup>, 徳成陽子<sup>1</sup>, 木下雄司<sup>1</sup>, 阪上 学<sup>2</sup>, 佐伯隆広<sup>2</sup>, 近田明男<sup>2</sup>, 五天千明<sup>2</sup>, 山本花奈子<sup>2</sup>, 加藤千恵子<sup>2</sup>, 長井英夫<sup>2</sup>  
<sup>1</sup>独立行政法人国立病院機構金沢医療センター統括診療部臨床工学技士室, <sup>2</sup>独立行政法人国立病院機構金沢医療センター循環器科

### MP5-3 肺静脈隔離後、アデノシン三リン酸急速静注でexitのみの一過性再伝導を認めた一例

中野僚哉<sup>1</sup>, 浜 義之<sup>2</sup>, 芳森亜希子<sup>1</sup>, 冨田和弘<sup>1</sup>, 望月純也<sup>1</sup>, 桑原大志<sup>3</sup>, 松戸裕治<sup>2</sup>, 山本雅史<sup>2</sup>, 氷見寿治<sup>2</sup>, 佐々木優二<sup>1</sup>  
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### MP5-4 非侵襲的陽圧換気を導入しても呼吸管理に苦慮した心房細動アブレーションの2例

小林聡子, 中村 光, 鈴木良美, 臼井達也, 吉岡二郎  
長野赤十字病院循環器内科

### MP5-5 心房細動アブレーションにおけるBISモニターの使用経験

新井淳一郎<sup>1</sup>, 後藤佑介<sup>2</sup>, 入野虎義<sup>1</sup>, 能重葉山<sup>1</sup>, 岩田晶子<sup>1</sup>, 齋藤一樹<sup>3</sup>, 山崎継敬<sup>4</sup>, 竹中 創<sup>5</sup>  
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## 遠隔モニタリング（メディカルプロフェッショナル）

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昭和大学医学部内科学講座 循環器内科学部門

### MP6-1 イベント発生からアラート受信までに時間的ずれを生じた遠隔モニタリングの1例

縮 友和<sup>1</sup>, 澤地 航<sup>1</sup>, 高澤俊彦<sup>1</sup>, 山田浩昭<sup>1</sup>, 山崎継敬<sup>2</sup>

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### MP6-2 遠隔モニタリングシステムを活用した病院連携IPG外来～連携病院への支援～

清田由佳利<sup>1</sup>, 本田俊弘<sup>2</sup>, 古山准二郎<sup>2</sup>, 堺 美郎<sup>1</sup>, 米村友秀<sup>1</sup>, 田中靖章<sup>2</sup>, 劔 卓夫<sup>2</sup>, 岡松秀治<sup>2</sup>, 梶原正貴<sup>2</sup>

<sup>1</sup>済生会熊本病院臨床工学部, <sup>2</sup>済生会熊本病院循環器内科

### MP6-3 デバイストラブルの早期発見に対する遠隔モニタリングシステムの有用性に関する検討

高野梨絵<sup>1</sup>, 島野寛也<sup>1</sup>, 小田切史徳<sup>2</sup>, 小松さやか<sup>3</sup>, 田淵晴名<sup>3</sup>, 関田 学<sup>3</sup>, 戸叶隆司<sup>2</sup>, 住吉正孝<sup>4</sup>, 中里祐二<sup>2</sup>, 代田浩之<sup>3</sup>

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### MP6-4 病床を持たない循環器専門クリニックにおける遠隔モニタリングシステムの運用の工夫とメディカルスタッフの役割

長町千里<sup>1</sup>, 井上完起<sup>2</sup>, 前川順子<sup>1</sup>, 谷口郁子<sup>1</sup>, 富樫秋奈<sup>1</sup>, 高田まり子<sup>1</sup>, 阪口恵美<sup>3</sup>, 鈴木紀子<sup>3</sup>, 山本享子<sup>3</sup>, 矢川真弓子<sup>2</sup>, 辺 泰樹<sup>4</sup>, 梅村 純<sup>2</sup>, 住吉徹哉<sup>4</sup>, 友池仁暢<sup>2</sup>

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### MP6-5 遠隔モニタリングシステムをもちいたフォローアップの信頼性に関する検討—対面診療との比較—

小林成道<sup>1</sup>, 丹羽 敦<sup>1</sup>, 清水憲彦<sup>1</sup>, 森 賢人<sup>2</sup>, 蜂矢健太<sup>2</sup>, 後藤利彦<sup>2</sup>, 大手信之<sup>2</sup>

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## Devices 5

**Chairs Hiroshi Nakajima**

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**Yasunaga Hiyoshi**

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### **P33-1 Development of atrioventricular block and diagnostic value of stored electrocardiograms in patients with sick sinus syndrome and implanted pacemaker**

**Junya Hosoda<sup>1</sup>, Toshiyuki Ishikawa<sup>1</sup>, Shinichi Sumita<sup>2</sup>, Kohei Matsushita<sup>1</sup>, Katsumi Matsumoto<sup>1</sup>, Yuichiro Kimura<sup>1</sup>, Yutaka Ogino<sup>1</sup>, Yuka Taguchi<sup>1</sup>, Hirooki Matsushita<sup>1</sup>, Takeshi Nakagawa<sup>1</sup>, Kazuo Kimura<sup>2</sup>, Satoshi Umemura<sup>1</sup>**

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### **P33-2 The case of lead fracture of the Linx implantable cardiac defibrillator (ICD) lead**

**Tomoaki Hasegawa<sup>1</sup>, Yukio Sekiguchi<sup>1</sup>, Kojiro Ogawa<sup>1</sup>, Mitsuhiro Fukata<sup>1</sup>, Toru Adachi<sup>2</sup>, Yasuhiro Yokoyama<sup>2</sup>, Akihiko Nogami<sup>1</sup>, Kazutaka Aonuma<sup>1</sup>**

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### **P33-3 Sudden Change to Safe Backup Mode Discovered by Remote Monitoring**

**Yoichi Ajiro<sup>1</sup>, Minoru Kawai<sup>2</sup>, Kunihiro Shimizu<sup>1</sup>, Kyoichiro Yazaki<sup>1</sup>, Takashi Saito<sup>1</sup>, Fumiaki Mori<sup>1</sup>, Kazunori Iwade<sup>1</sup>**

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### **P33-4 The Time Course of Current of Injury at Active Fixation Leads Implantation**

**Hisa Shimojima, Daisuke Wakatsuki, Masaaki Kurata, Miki Tsujiuchi, Sakura Nagumo, Chisato Sato, Takuya Mizukami, Masahiro Sasai, Etsushi Kyuno, Naoko Ikeda, Ayaka Nogi, Atsuo Maeda, Hideyuki Maezawa, Kohei Wakabayashi, Yoshitaka Iso, Tokutada Sato, Mio Ebato, Hiroshi Suzuki**

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**P33-5**

### **3-D Coronary Sinus Mapping with Plain CT Is Useful before the Implantation of CRT Device**

**Mariko Kawasaki, Shinji Ishimaru, Risa Kakinoki, Masahiro Takahata, Motohito Tadokoro, Shunsuke Kitani, Teppei Sugaya, Tadashi Igarashi, Hiroaki Okabayashi, Jungo Furuya, Yasumi Igarashi, Keiichi Igarashi**

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### **P34-1 A case of early repolarization syndrome suspected by electrocardiogram after VF attack**

**Yoshinari Enomoto**, Yasutake Toyoda, Naohiko Sahara, Takahito Takagi, Yuriko Narabayashi, Hikari Hashimoto, Naoshi Ito, Shingo Kujime, Keijiro Nakamura, Takao Sakata, Mahito Noro, Kaoru Sugi

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### **P34-2 A Case of Premature Ventricular Contraction Eliminated within the Right Coronary Cusp**

**Kenji Kawamoto**<sup>1</sup>, Satoshi Nagase<sup>2</sup>, Keishi Ichikawa<sup>1</sup>, Masafumi Tanimoto<sup>1</sup>, Hiroaki Ohtsuka<sup>1</sup>, Kazuhiko Yamamoto<sup>1</sup>, Yuusuke Katayama<sup>1</sup>, Machiko Tanakaya<sup>1</sup>, Satoru Sakuragi<sup>1</sup>

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### **P34-3 A case of vasospastic angina that caused pulseless electrical activity after cardioversion of ventricular fibrillation by an implantable cardioverter defibrillator**

**Yuuki Sugitani**, Yohei Ohi, Hiroyuki Tamada, Chisato Ishikawa, Noritsugu Uemori, Ryoji Yokota

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### **P34-4 Catheter ablation of frequent ventricular premature complexes with left bundle-branch block morphology improve left ventricular function than right bundle-branch block morphology**

**Yasutoshi Shinoda**, Kenji Kuroki, Kojiro Ogawa, Eikou Sai, Mitsuhiro Fukata, Yoshiaki Yui, Takeshi Machino, Miyako Igarashi, Yukio Sekiguchi, Akihiko Nogami, Kazutaka Aonuma

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**P34-5**

## **Epicardial Ablation Suppressed Malignant Arrhythmia Originating from a Structurally Normal Ventricular Apex with Aborted Sudden Cardiac Death**

**Yoshimori An<sup>1</sup>, Michio Nagashima<sup>1</sup>, Masato Fukunaga<sup>1</sup>, Ken-ichi Hiroshima<sup>1</sup>, Kengo Korai<sup>1</sup>, Shota Tohoku<sup>1</sup>, Kentaro Hayashi<sup>1</sup>, Yu Makihara<sup>1</sup>, Kenji Ando<sup>1</sup>, Tomoaki Ito<sup>2</sup>, Harushi Niu<sup>2</sup>, Masahiko Goya<sup>3</sup>**

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## 心電図2 (メディカルプロフェッショナル)

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### MP7-1 ML誘導による追加胸部誘導(V3R,V4R,V5R,V7,V8,V9)の異型拍における実誘導と導出誘導のQRS部分一致度の検討

小松崎達也<sup>1</sup>, 三橋直人<sup>1</sup>, 藤枝敏知<sup>1</sup>, 高野真史<sup>1</sup>, 久松 学<sup>1</sup>, 倉持龍彦<sup>1</sup>, 寺田紀子<sup>1</sup>, 細川正浩<sup>1</sup>, 小橋和彦<sup>1</sup>, 家坂義人<sup>2</sup>

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### MP7-2 QT時間と早期再分極時間(JTp)の変動性に関する検討

竹内佑佳<sup>1</sup>, 及川彰太<sup>2</sup>, 永田梨奈<sup>2</sup>, 大目木佑美<sup>2</sup>, 細井美沙<sup>2</sup>, 畑 忠善<sup>3</sup>

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### MP7-3 先天性QT延長症候群診断におけるマスター負荷心電図の有用性：トレッドミル運動負荷心電図との比較

深町美尋<sup>1</sup>, 林 研至<sup>1</sup>, 大江宏康<sup>1</sup>, 堀田 宏<sup>1</sup>, 斉藤剛克<sup>3</sup>, 高村雅之<sup>2</sup>, 酒井佳夫<sup>1</sup>, 太田邦雄<sup>3</sup>, 山岸正和<sup>2</sup>, 和田隆志<sup>1</sup>

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### MP7-4 J波と心臓MRIにおける遅延造影との関連性および川崎病におけるJ波の頻度と特徴

澤田由梨子<sup>1</sup>, 宇佐知里郁<sup>2</sup>, 小山 望<sup>2</sup>, 寺島正浩<sup>2</sup>, 角 勇樹<sup>1</sup>, 平尾見三<sup>3</sup>, 磯辺光章<sup>4</sup>, 笹野哲郎<sup>1</sup>

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### MP7-5 J波症候群における心筋再分極過程指標と血清電解質の関係

今橋麻里奈<sup>1</sup>, 笹木理恵<sup>1</sup>, 佐藤伸之<sup>2</sup>, 伊藤栄祐<sup>1</sup>, 宮口智子<sup>1</sup>, 斉藤久美子<sup>1</sup>, 久保田治代<sup>1</sup>, アハメドターリップ<sup>2</sup>, 杉山英太郎<sup>2</sup>, 坂本 央<sup>2</sup>, 田邊康子<sup>2</sup>, 竹内利治<sup>2</sup>, 赤坂和美<sup>1</sup>, 川村祐一郎<sup>2</sup>, 藤井聡<sup>1</sup>, 長谷部直幸<sup>2</sup>

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### MP8-1 胸水貯留により植込型ループレコーダの心電図記録波形が低電位を示した症例

境田知子<sup>1</sup>, 五関善成<sup>2</sup>, 齋藤由佳<sup>1</sup>, 寶田 顕<sup>2</sup>, 矢崎義直<sup>2</sup>, 尾形申式<sup>1</sup>, 山科 章<sup>2</sup>

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### MP8-2 当院における原因不明の失神に対するimplantable loop recorder(ILR)植込み症例の検討

植田隆介<sup>1</sup>, 柴田幸美<sup>1</sup>, 高田 裕<sup>1</sup>, 元木康一郎<sup>2</sup>, 小竹康仁<sup>2</sup>, 赤岩 譲<sup>2</sup>, 安岡良文<sup>2</sup>, 栗田隆志<sup>2</sup>

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### MP8-3 体外式ループレコーダー検査に関する問題点の検討

野々山則子, 佐野裕美, 工藤悦子, 秋山健太郎, 渡邊志穂, 石田誠司, 関恵理奈, 鈴木なおみ, 東 祐圭

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### MP8-4 当院における植込み型心電ループレコーダ(ILR)の成績

鈴木綾子<sup>1</sup>, 吉田幸司<sup>1</sup>, 富沢直樹<sup>1</sup>, 中島 修<sup>1</sup>, 鏑田晋治<sup>1</sup>, 佐藤 明<sup>2</sup>, 新田順一<sup>2</sup>

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### MP8-5 当病棟における心電図の理解を深める取り組み

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