

Day 2 (Nov. 21)

■ 08:30-10:00

Atrial Fibrillation 4

ROOM 1 | ENG

Chair:	Yong Seog Oh (College of Medicine, The Catholic University of Korea, Republic of Korea) Hui-Nam Pak (Yonsei University College of Medicine, Republic of Korea)	
Speaker:	How to Use Anticoagulants in Cases of Absence of LAA	Yong Seog Oh (College of Medicine, The Catholic University of Korea, Republic of Korea)
	Atrial Fibrillation Ablation with Balloon Technologies, Cryo Balloon vs RF Balloon	Sung Woo Lee (Georgetown University, United States)
	Leadless Pacemaker	Sung Woo Lee (Georgetown University, United States)
	Gene Expression Profiles in the Left Atria of Patients with Valvular Atrial Fibrillation	Yung-Hsin Yeh (Chang-Gung Memorial Hospital, Taiwan)

■ 08:30-08:40

TTS 2020: Welcome Address/Opening Remarks

ROOM 2 | ENG

Welcome Address	Yong Seog Oh (College of Medicine, The Catholic University of Korea, Republic of Korea)
Opening Remarks 1	Young-Hoon Kim (Korea University College of Medicine, Republic of Korea)
Opening Remarks 2	Akihiko Nogami (University of Tsukuba, Japan)
Opening Remarks 3	Shih-Ann Chen (Taipei Veteran General Hospital, Taiwan)

■ 08:40-10:00

TTS 1: Advancement in Brugada Syndrome

ROOM 2 | ENG

Chair:	Gi-Byoung Nam (University of Ulsan College of Medicine, Republic of Korea) Akiko Ueda (Kyorin University School of Medicine, Japan)	
Speaker:	Novel Electrophysiology of Brugada Syndrome	Fa-Po Chung (Taipei Veterans General Hospital, Taiwan)
	Use of Deep Learning Technique in Analyzing ECG Pattern for Diagnosis of Brugada Syndrome	Yu-Feng Hu (Taipei Veterans General Hospital, Taiwan)
	Early Repolarization Pattern in University Athletes: Insight from the 2015 Gwangju Summer Universiade	Namsik Yoon (Chonnam National University Medical School, Republic of Korea)
	<i>Joint Discussion</i>	

Atrial Fibrillation 5

ROOM 3 | ENG

Chair:	Young Keun On (School of Medicine, Sungkyunkwan University, Republic of Korea) Doosang Kim (Veterans Health Service Medical Center, Republic of Korea)	
Speaker:	Complication Rate and Annual Trend of AF Ablation	Pil-Sung Yang (CHA University, Republic of Korea)
	Ablation of Persistent AF: Comparison of Different Ablation Techniques Beyond PVI	Young-Hoon Kim (Korea University College of Medicine, Republic of Korea)
	Modifiable Risk Factors for Incident Atrial Fibrillation in Korea (e.g. Insulin Resistance, Inflammation, Smoking)	Jin-Kyu Park (Hanyang University College of Medicine, Republic of Korea)
	Hybrid Approach of AF Treatment: Thoracoscopic and Catheter Ablation	Young Keun On (School of Medicine, Sungkyunkwan University, Republic of Korea)
	<i>Discussion</i>	

CIED & VT

ROOM 4 | ENG

Chair:	Dong-Gu Shin (Yeungnam University College of Medicine, Republic of Korea)	
Speaker:	Current Status of Cardiac Device Therapy for Primary Prevention of Sudden Arrhythmic Death in Busan, Ulsan, and Gyeong-nam Areas	Jong Sung Park (Dong-A University College of Medicine, Republic of Korea)
	Is Not Defibrillation Threshold Testing Really Necessary during ICD Implantation?	Myung Hwan Bae (Kyungpook National University School of Medicine, Republic of Korea)
	Difference of Korean CIEDs Indications from AHA/ACC/HRS CIEDs Indications	Dong-Hyeok Kim (Ewha Womans University School of Medicine, Republic of Korea)
	Noninvasive Cardiac Radiation for Ablation of Ventricular Tachycardia	Myung-Jin Cha (Seoul National University College of Medicine, Republic of Korea)
	<i>Discussion</i>	

CIED 2		ROOM 5 ENG
Chair:	Moon Hyoung Lee (Yonsei University College of Medicine, Republic of Korea) June Huh (School of Medicine, Sungkyunkwan University, Republic of Korea)	
Speaker:	Efficacy and Safety of His Bundle Pacing	Kieu Ngoc Dung (Cho Ray Hospital, Vietnam)
	The Role of Physiological Pacing in Pacemaker Dependent Patients: RV Septal Pacing, His Bundle Pacing	Jung Hoon Sung (CHA University, Republic of Korea)
	Feasibility and Clinical Outcomes of LBB Pacing	Tae-Hoon Kim (Yonsei University College of Medicine, Republic of Korea)
	Tip of SCD Implantation	Sang Weon Park (Sejong General Hospital, Republic of Korea)
	How to Perform His-Purkinje System Pacing in Patients with Bradycardia?	Ngai-Yin Chan (Princess Margaret Hospital, Hong Kong)
	<i>Discussion</i>	

■ 08:30-09:15

Arrhythmia Review Course 1: Basic Interpretation of Arrhythmia		ROOM 6 KOR
Program Director:	Man Young Lee (College of Medicine, The Catholic University of Korea, Republic of Korea)	
Speaker:	Ji Hyun Lee (Seoul National University College of Medicine, Republic of Korea)	
	Young Jun Park (Yonsei University College of Medicine, Republic of Korea)	
	Hancheol Lee (National Health Insurance Service Ilsan Hospital, Republic of Korea)	
	<i>Discussion</i>	

■ 09:15-10:00

Arrhythmia Review Course 2: Basic Bradycardia and Pacemaker		ROOM 6 KOR
Program Director:	Gyo-Seung Hwang (Ajou University School of Medicine, Republic of Korea)	
Speaker:	Chan Hee Lee (Yeungnam University College of Medicine, Republic of Korea)	
	In Geol Song (Baekje General Hospital, Republic of Korea)	
	Hyun Jun Cho (Daegu Fatima Hospital, Republic of Korea)	
	<i>Discussion</i>	

■ 10:15-11:45

SCD 2		ROOM 1 ENG
Chair:	Yongkeun Cho (Kyungpook National University School of Medicine, Republic of Korea) Gi-Byoung Nam (University of Ulsan College of Medicine, Republic of Korea)	
Speaker:	Mechanisms of Electrical Storm: Rotors Anchored by Enhanced NaV1.8 Dependent Late Sodium Current as a Driver of Torsades de Pointes	Yukiomi Tsuji (Nagasaki University, Japan)
	Calcium Handling Abnormalities Underlying SCD	Yung-Hsin Yeh (Chang-Gung Memorial Hospital, Taiwan)
	Inherited Arrhythmia Syndrome Predisposing to SCD	Jong-Il Choi (Korea University College of Medicine, Republic of Korea)

TTS 2: How to Improve Clinical Outcome of Catheter Ablation of AF		ROOM 2 ENG
Chair:	Seil Oh (Seoul National University College of Medicine, Republic of Korea) Ming-Hsiung Hsieh (Wan-Fang Hospital, Taipei Medical University, Taiwan)	
Speaker:	Ten-Year Outcome of Catheter Ablation in Patients With Persistent Atrial Fibrillation	Li-Wei Lo (Taipei Veterans General Hospital, Taiwan)
	High-Power Radiofrequency Ablation Guided by Unipolar Signal Modification for Pulmonary Vein Isolation	Koichiro Ejima (Tokyo Women's Medical University, Japan)
	Importance of Atrial Substrate in Catheter Ablation of Atrial Fibrillation	Yong Soo Baek (Inha University School of Medicine, Republic of Korea)
	<i>Joint Discussion</i>	

Atrial Fibrillation 6		ROOM 3 ENG
Chair:	Jae-Jin Kwak (Inje University College of Medicine, Republic of Korea) Jun-Hyung Kim (Chungnam National University College of Medicine, Republic of Korea)	
Speaker:	Risk Factor for AF (HTN, DM, Alcohol, Sex)	Yun Gi Kim (Korea University College of Medicine, Republic of Korea)
	Weight Change and Obesity	Yeong-Min Lim (St. Carollo Hospital, Republic of Korea)
	Physical Activity	Moo Nyun Jin (Inje University College of Medicine, Republic of Korea)
	The Role of Posterior Wall Isolation in Patients with Persistent Atrial Fibrillation	Jaemin Shim (Korea University College of Medicine, Republic of Korea)
	Does Myocardial Infarction Beget Atrial Fibrillation and Atrial fibrillation Beget Myocardial Infarction?	Hye Young Lee (Inje University College of Medicine, Republic of Korea)
	<i>Discussion</i>	

PSVT 1		ROOM 4 ENG
Chair:	Choong Hwan Kwak (Gyeongsang National University College of Medicine, Republic of Korea) Jung Hoon Sung (CHA University, Republic of Korea)	
Speaker:	Localization and Ablation of Focal Atrial Tachycardia	Jin-Kyu Park (Hanyang University College of Medicine, Republic of Korea)
	Functional Anatomy of AV Node	Il-Young Oh (Seoul National University College of Medicine, Republic of Korea)
	RFCA in Ebstein's Anomaly	Sung-Hwan Kim (College of Medicine, The Catholic University of Korea, Republic of Korea)
	How to Ablate AVRT and WPW Syndrome	Jung Myung Lee (School of Medicine, Kyung Hee University, Republic of Korea)
	<i>Discussion</i>	

Atrial Fibrillation 7		ROOM 5 ENG
Chair:	Dae Kyeong Kim (Inje University College of Medicine, Republic of Korea) Sang-Jin Han (College of Medicine, Hallym University, Republic of Korea)	
Speaker:	Recent Updates of Treatment with Antiarrhythmic Drugs in AF	So-Ryoung Lee (Seoul National University College of Medicine, Republic of Korea)
	Circulating Nucleotides: Their Contribution to the Pathogenesis of Atrial Fibrillation and the Possibility of Biomarkers	Tetsuo Sasano (Tokyo Medical and Dental University, Japan)
	PFO Closure for Stroke Prevention: An Excellent Guard or a Trouble Maker?	Eun Sun Jin (School of Medicine, Kyung Hee University, Republic of Korea)
	LAA Occlusion (New Imaging Techniques & Update)	Seung Yong Shin (Chung Ang University College of Medicine, Republic of Korea)
	<i>Discussion</i>	

■ 10:15-11:00

Arrhythmia Review Course 3: Narrow QRS Tachycardia		ROOM 6 KOR
Program Director:	Myung-Yong Lee (Dankook University College of Medicine, Republic of Korea)	
Speaker:	Won-Seok Choe (Sejong General Hospital, Republic of Korea)	
	Jin Kyung Hwang (Veterans Health Service Medical Center, Republic of Korea)	
	Euijae Lee (Sejong General Hospital, Republic of Korea)	
	<i>Discussion</i>	

■ 11:00-11:45

Arrhythmia Review Course 4: Wide QRS Tachycardia		ROOM 6 KOR
Program Director:	Hong Euy Lim (College of Medicine, Hallym University, Republic of Korea)	
Speaker:	Sung Ho Lee (School of Medicine, Sungkyunkwan University, Republic of Korea)	
	Min Soo Cho (University of Ulsan College of Medicine, Republic of Korea)	
	Sung Soo Kim (Chosun University College of Medicine, Republic of Korea)	
	<i>Discussion</i>	

■ 12:00-13:00

Scientific Session (DaiichiSankyo-Daewoong)		ROOM 1 ENG
Chair:	Moon Hyoung Lee (Yonsei University College of Medicine, Republic of Korea) Kee-Joon Choi (University of Ulsan College of Medicine, Republic of Korea)	
Speaker:	Optimal Anticoagulation Strategy in Elderly AF Patients	Hee Tae Yu (Yonsei University College of Medicine, Republic of Korea)
	Hot Issues in NOACs: Efficacy and Safety of Low Dose NOACs	So-Ryoung Lee (Seoul National University College of Medicine, Republic of Korea)

Scientific Session (Chong Kun Dang)		ROOM 2 ENG
Chair:	Seongwook Han (Keimyung University School of Medicine, Republic of Korea)	
Speaker:	Wearable Devices in Cardiology: Reality, Not a Dream	Eue Keun Choi (Seoul National University College of Medicine, Republic of Korea)
	Recent Update in Oral Anticoagulation Therapy & SPIRE Studies	Jong-Il Choi (Korea University College of Medicine, Republic of Korea)
	Anti-Arrhythmic Effect of Carvedilol on Suppressing PVC/VT from OT	Jongmin Hwang (Keimyung University School of Medicine, Republic of Korea)

■ 13:00-14:00

2020 개원의 및 전공의 NOAC 연수교육 2

KOR

Chair:	Byung-Chun Jung (Daegu Fatima Hospital, Republic of Korea) Dae Kyeong Kim (Inje University College of Medicine, Republic of Korea)	
Speaker:	시술 혹은 수술 전후에 따른 항응고제의 용법 및 주의사항	Young Soo Lee (Daegu Catholic University College of Medicine, Republic of Korea)
	환자의 특성에 따른 항응고제 사용의 주의 사항	Tae-Hoon Kim (Yonsei University College of Medicine, Republic of Korea)
	<i>Discussion</i>	

■ 13:15-14:45

Ventricular Tachycardia 3

ROOM 1 | ENG

Chair:	Young-Hoon Kim (Korea University College of Medicine, Republic of Korea) Eun-Jung Bae (Seoul National University College of Medicine, Republic of Korea)	
Speaker:	My Favourite Approach for Haemodynamically Unstable Ischaemic and Non-ischaemic Ventricular Tachycardia Ablation	Kyoko Soejima (Kyorin University, Japan)
	Ablation of Ventricular Fibrillation Associated with Brugada Syndrome	Shih-Ann Chen (Taipei Veteran General Hospital, Taiwan)
	Iatrogenic Aortic Regurgitation after Radiofrequency Ablation of Idiopathic Ventricular Arrhythmias Originating from the Aortic Valvular Region	Akihiko Nogami (University of Tsukuba, Japan)

TTS 3: Therapeutic Innovations in Arrhythmia

ROOM 2 | ENG

Chair:	Boyoung Joung (Yonsei University College of Medicine, Republic of Korea) Hsuan-Ming Tsao (National Yang Ming University Hospital, Taiwan)	
Speaker:	Acute and Long-Term Results of Bipolar Radiofrequency Catheter Ablation of Refractory Ventricular Arrhythmias of Deep Intramural Origin	Miyako Igarashi (University of Tsukuba, Japan)
	Noninvasive Cardiac Radioablation for Ventricular Tachycardia	Myoung-Jin Cha (Seoul National University College of Medicine, Republic of Korea)
	RFCA and Ischemic Stroke in AF Patients	Yun Gi Kim (Korea University College of Medicine, Republic of Korea)
	<i>Joint Discussion</i>	

Atrial Fibrillation 8

ROOM 3 | ENG

Chair:	Seongwook Han (Keimyung University School of Medicine, Republic of Korea)	
Speaker:	Cardiac Image (Cardiac MRI) and Arrhythmia	Junbeom Park (Ewha Womans University School of Medicine, Republic of Korea)
	Device-Detected AF and Its Proper Management for Stroke Prevention	Kwang-No Lee (Ajou University School of Medicine, Republic of Korea)
	Clinical Outcome after Cryoballoon AF Ablation	Young Keun On (School of Medicine, Sungkyunkwan University, Republic of Korea)
	The Endpoint of Catheter Ablation for Persistent Atrial Fibrillation	Hyoung-Seob Park (Keimyung University School of Medicine, Republic of Korea)
	New Technologies for AF Ablation: Energy Sources and Delivery Strategies	Eue Keun Choi (Seoul National University College of Medicine, Republic of Korea)
	<i>Discussion</i>	

Smart Health Care & AI 2

ROOM 4 | ENG

Chair:	Jin-Seok Kim (Korea University College of Medicine, Republic of Korea) Yae Min Park (Gachon University School of Medicine, Republic of Korea)	
Speaker:	AI-ECG Interpretation	Il-Young Oh (Seoul National University College of Medicine, Republic of Korea)
	The Usefulness of Brain Imaging in Cryptogenic Stroke Adjunct to Machine Learning	Dae In Lee (Chungbuk National University College of Medicine, Republic of Korea)
	Mobile Web Based ECG Reading Platform by Collective Intelligence	Yoo Ri Kim (Dongguk University School of Medicine, Republic of Korea)
	Continuous Home-Based Monitoring with Mobile Health Devices for AF Detection	Chi Keong Ching (National Heart Centre Singapore, Singapore)
	Clinical Implication of TWA/HRT/fQRS/QTc Dispersion	Jae-Jin Kwak (Inje University College of Medicine, Republic of Korea)
	<i>Discussion</i>	

CIED 3		ROOM 5 ENG
Chair:	Dong-Gu Shin (Yeungnam University College of Medicine, Republic of Korea) Gyo-Seung Hwang (Ajou University School of Medicine, Republic of Korea)	
Speaker:	Predictors of CRT Responders (ECG, Echocardiogram, MRI)	Lae-Young Jung (Chonbuk National University Medical School, Republic of Korea)
	Should DFT Testing be Required in S-ICD?	Hee Tae Yu (Yonsei University College of Medicine, Republic of Korea)
	Management of Complication of CIED Implantation: Based on the New Guidelines	Young Soo Lee (Daegu Catholic University College of Medicine, Republic of Korea)
	Lead Extraction Using TightRail™ -Indications & Real Cases-	Seung-Jung Park (School of Medicine, Sungkyunkwan University, Republic of Korea)
	How and Where to Implant LV Lead for CRT?	Jae-Sun Uhm (Yonsei University College of Medicine, Republic of Korea)
	<i>Discussion</i>	

SCD 3		ROOM 6 ENG
Chair:	Jin-Bae Kim (School of Medicine, Kyung Hee University, Republic of Korea) Tae-Seok Kim (College of Medicine, The Catholic University of Korea, Republic of Korea)	
Speaker:	Telecommunicator CPR	Yih Yng Ng (Tan Tock Seng Hospital, Singapore)
	The Risk of SCD in Athlete	Jin-Bae Kim (School of Medicine, Kyung Hee University, Republic of Korea)
	Medical Therapy for SCD Prevention: Focusing on ARNI (Recent ACC/ESC Consensus Update)	Woo-Hyun Lim (SMG-SNU Boramae Medical Center, Republic of Korea)
	The Application of Noninvasive Signal-averaged Electrocardiogram Analysis in Patients with Arrhythmogenic Right Ventricular Cardiomyopathy	Chin-Yu Lin (Taipei Veterans General Hospital, Taiwan)
	Risk Stratification & Treatment for J Wave Syndrome	Namsik Yoon (Chonnam National University Medical School, Republic of Korea)
	<i>Discussion</i>	

■ 15:00-16:30

PSVT 2		ROOM 1 ENG
Chair:	Eun-Jung Bae (Seoul National University College of Medicine, Republic of Korea) Man Young Lee (College of Medicine, The Catholic University of Korea, Republic of Korea)	
Speaker:	Ablation of Atypical Flutters	Kelvin Chua (National Heart Centre Singapore, Singapore)
	Atypical AVNRT Using Variants of Slow Pathway Extending to the Right Atrial Free Wall	Yoshiaki Kaneko (Gunma University Graduate School of Medicine, Japan)
	How to Differentiate Ventricular or Supraventricular Tachycardia?	Sung-Won Jang (College of Medicine, The Catholic University of Korea, Republic of Korea)

■ 15:00-16:20

TTS 4: Evolution of Treatment: Insight into Ablation and Device		ROOM 2 ENG
Chair:	Hui-Nam Pak (Yonsei University College of Medicine, Republic of Korea) Koichi Inoue (Sakurabashi Watanabe Hospital, Japan)	
Speaker:	Electrical Isolation of the Marshall Bundle by Radiofrequency Catheter Ablation in Patients with Atrial Fibrillation	Seiji Takatsuki (Keio University School of Medicine, Japan)
	Novel Algorithm Facilitate Catheter Ablation of Atypical Flutter	Cheng-Hung Li (Taichung Veterans General Hospital, Taiwan)
	Virtual Computer Simulation Modeling for Cardiac Resynchronization Therapy in Patients with Heart Failure	Jae-Sun Uhm (Yonsei University College of Medicine, Republic of Korea)
	<i>Joint Discussion</i>	

■ 16:20-16:30

TTS 2020: Closing Remarks		ROOM 2 ENG
Closing Remarks 1	Young-Hoon Kim (Korea University College of Medicine, Republic of Korea)	
Closing Remarks 2	Akihiko Nogami (University of Tsukuba, Japan)	
Closing Remarks 3	Shih-Ann Chen (Taipei Veteran General Hospital, Taiwan)	

Atrial Fibrillation 9		ROOM 3 ENG
Chair:	Jin-Seok Kim (Korea University College of Medicine, Republic of Korea)	
Speaker:	The Outcomes of Redo AF Ablation: Differences between AF and AT/AFL	Hee Tae Yu (Yonsei University College of Medicine, Republic of Korea)
	Anticoagulation Strategy after PCI in AF Patients	YouMi Hwang (College of Medicine, The Catholic University of Korea, Republic of Korea)
	Anticoagulation Strategy after AF Ablation	June Namgung (Inje University College of Medicine, Republic of Korea)
	The Implications of Catheter Ablation for Atrial Flutter in Preventing Stroke Risk: A Nationwide Population-Based Cohort Study	Yung-Lung Chen (Kaohsiung Chang Gung Memorial Hospital, Taiwan)
	Air Pollution and Arrhythmia	In-Soo Kim (Yonsei University College of Medicine, Republic of Korea)
	<i>Discussion</i>	

Noninvasive		ROOM 4 KOR
Chair:	Myung Chul Hyun (Kyungpook National University School of Medicine, Republic of Korea) Byung-Chun Jung (Daegu Fatima Hospital, Republic of Korea)	
Speaker:	Update of 2020 Syncope	Dong-Hyeok Kim (Ewha Womans University School of Medicine, Republic of Korea)
	Efficacy of Tilt Training for Recurrent Syncope	Kwang Jin Chun (Kangwon National University School of Medicine, Republic of Korea)
	HRT & TWA for Predicting CV Events in Patients with HF (K-REDEFINE Study)	June Soo Kim (School of Medicine, Sungkyunkwan University, Republic of Korea)
	Prediction of Arrhythmic Risk Using Exercise/Holter ECG Data	Young Soo Lee (Daegu Catholic University College of Medicine, Republic of Korea)
	AF Screening Update	Nam Ho Kim (Wonkwang University School of Medicine, Republic of Korea)
	<i>Discussion</i>	

SCD 4		ROOM 5 ENG
Chair:	Dong Jin Oh (College of Medicine, Hallym University, Republic of Korea) Yongkeun Cho (Kyungpook National University School of Medicine, Republic of Korea)	
Speaker:	ICD Implantations in Children	Naokata Sumitomo (Saitama Medical University International Medical Center, Japan)
	Autonomic Modulation and Analysis for Sudden Cardiac Death	Wei-Chung Tsai (Kaohsiung Medical University, Taiwan)
	COVID-19 and Sudden Cardiac Death	Young Choi (College of Medicine, The Catholic University of Korea, Republic of Korea)
	COVID-19 and Arrhythmia	Ju Youn Kim (College of Medicine, The Catholic University of Korea, Republic of Korea)
	<i>Discussion</i>	

EKG Educational Course		ROOM 6 KOR
Chair:	Sang-Jin Han (College of Medicine, Hallym University, Republic of Korea) Dae Hyeok Kim (Inha University School of Medicine, Republic of Korea)	
Speaker:	AV Block and Intraventricular Conduction Defects	Kyeongmin Byeon (Seoul Medical Center, Republic of Korea)
	ECG Interpretation of Patients with CIED	Sang-Jin Han (College of Medicine, Hallym University, Republic of Korea)
	Differential Diagnosis of Narrow QRS Tachycardia	Sung Soo Kim (Chosun University College of Medicine, Republic of Korea)
	<i>Discussion</i>	