

6th Asia-Pacific Extracorporeal Life Support Organization (APELSO) 2023

Post-Pandemic, New Standards

DAY 1: November 2 (Thu)

Time	Grandballroom 1+3 (5F)	
08:30-10:00	Opening and Keynote Address	Moderators: Kyung Hwan Kim (KSCVT Chief Director, Korea) John Fraser (APELSO Chair, Australia)
08:30-08:45(15')	Opening and Welcome Address	Kiick Sung (APELSO 2023 Conference President, Korea)
08:45-09:10(25')	Planning for future: Building systems with sustainable ECMO infrastructure	Graeme MacLaren (ELSO President, Singapore)
09:10-09:35(25')	APELSO : Scaling newer heights and global collaborations	John Fraser (APELSO Chair, Australia)
09:35-10:00(25')	ECMO in South Korea: Past, Present and Future	Jae Seung Jung (APELSO 2023 Conference Chair, Korea)
10:00-10:30	Break	
10:30-12:00	Plenary Session	Moderators: Gee Young Suh (Korea) Glenn Whitman (USA)
10:30-10:50	ECLS, what should future research focus on?	Robert Bartlett (USA)
10:50-11:10	Postcardiotomy ECLS, what is the future?	Roberto Lorusso (Netherlands)
11:10-11:30	Brain MRI during ECMO support: Results from SAFE MRI ECMO study	Sung-Min Cho (USA)
11:30-11:50	Development of ECMO in Japan and prospects for the future	Shingo Ichiba (Japan)
11:50-12:00	Intermission	
12:00-12:30	Break for room partition (Grandballroom, 5F)	
12:30-13:30	Luncheon Session 1: Sponsored by Abbott Medical Korea (Grand Ballroom 1, 5F)	Moderator: Jae Seung Jung (Korea)
12:40-13:00	Reimbursement of CentriMag in Korea	Yanghyun Cho (Korea)
13:10-13:30	Clinical theory of CentriMag	Joon Hwa Hong (Korea)
12:30-13:30	Luncheon Session 2: Sponsored by Medtronic Korea (Grand Ballroom 2, 5F)	Moderator: Cheong Lim (Korea)
12:30-12:35	Opening Remarks	Cheong Lim (Korea)
12:35-12:50	Avalus Valve Overview & Experience	Seung Hyun Lee (Korea)
12:50-13:05	Mosaic valve overview & experience	Jae Suk Yoo (Korea)
13:05-13:25	Q&A Discussion	All
13:25-13:30	Closing Remarks	Cheong Lim (Korea)
12:30-13:30	Luncheon Session 3: Sponsored by TRANSONIC (Grand Ballroom 3, 5F)	Moderator: Seunghwan Song (Korea)
12:30-13:10	How recirculation measurement by ELSA monitor can optimize V-V ECMO treatment and indicate potential heart problem	Nikolai Krivitski (USA)
18:30~	Welcome Ceremony -Grand Intercontinental Seoul Parnas	

DAY 2: November 3 (Fri)

Time	Grandballroom 1+3 (5F)	
12:00-13:00	Luncheon Session 5: Sponsored by Getinge Medical Korea (Grand Ballroom 1, 5F) "Is extracorporeal cardiopulmonary resuscitation effective in both IHCA and OHCA?"	Moderator: Jae Seung Jung (Korea)
12:00~12:20	ECPR- Out of Hospital Cardiac Arrest	Vincent Pellegrino (Australia)
12:20~12:40	ECPR- Intra Hospital Cardiac Arrest	Mathew Schmidt (France)
12:40~13:00	Discussion	
12:00-13:00	Luncheon Session 6: Sponsored by Edwards Lifesciences (Grand Ballroom 2, 5F) - New treatment paradigm : Standard heart valve surgery with RESILIA	Moderator: Cheong Lim (Korea), Sak Lee (Korea)
12:00~12:25	Should RESILIA Tissue be the First line treatment for AV disease patients?	Todd M. Dewey (USA)
12:25~12:50	INSPIRIS RESILIA experience in AMC and introducing new mitral valve with Resilia tissue, MITRIS RESILIA	Jae Suk Yoo (Korea)
12:50~13:00	Q&A	
12:00-13:00	Luncheon Session 7: Sponsored by Fresenius Medical Care Korea (Grand Ballroom 3, 5F)	Moderator: Kyung Hwan Kim (Korea)
12:00~13:00	Optimizing Extracorporeal life support (ECLS) Care	Thomas Müller (Germany)
19:00~	Gala Dinner -Floating Island Convention Center (Some Saevit)	

DAY 3: November 4 (Sat)		
Time	Grandballroom 1 (5F)	
08:00-09:00	Round Table Discussion 2 (ECMO-CS trial) Sponsored by Terumo Korea	
09:00-10:20	Postcardiotomy ECLS Joint Session with KTCVS ECMO Study Group (심장혈관흉부외과 ECMO 연구회)	Moderators: Cheong Lim (Korea) Roberto Lorusso (Netherlands)
09:00-09:15	Postcardiotomy shock: How to stratify risks	Heemoon Lee (Korea)
09:15-09:30	Postcardiotomy MCS management: what are my options?	Leonardo Salazar (Columbia)
09:30-09:45	Bridge to surgery with Post-infarction mechanical complications: Is there a role for ECLS?	Roberto Lorusso (Netherlands)
09:45-10:00	Postcardiotomy ECMO and frailty: tips for success	Pranya Sakiyalak (Thailand)
10:00-10:20	Discussion	Panels: Pil-Je Kang (Korea), Sue Hyun Kim (Korea), Seok In Lee (Korea), Hee Jung Kim (Korea)
10:20-10:40	Break	
Time	Grandballroom 1 (5F)	
10:40-12:05	APELSO Regional Updates	Moderators: Hwa Jin Cho (Korea), John Fraser (International)
10:40-10:47	Australia	Jacky Suen (Australia)
10:47-10:54	China	Liangshan Wang (China)
11:01-11:08	Hong Kong	Wai Ching Sin (Hong Kong)
11:08-11:15	Indonesia: Update perfusion in Indonesia	Ibnu Sofa (Indonesia)
11:15-11:22	Japan	Keibun Liu (Japan)
11:22-11:29	Korea	Jae Seung Jung (Korea)
11:29-11:36	Malaysia	Suhaini Kadiman (Malaysia)
11:36-11:43	New Zealand	Shay Mc Guinness (New Zealand)
11:43-11:50	Philippines: Clinical Profile and Treatment Outcomes of Patients with Leptospirosis and Acute Respiratory Failure who Underwent ECMO at the National Kidney and Transplant Institute	Joann Kathleen Garcia (Philippines)
11:50-11:57	Singapore	Mathew Jose (Singapore)
11:57-12:04	Taiwan	Yih-Sharnq Chen (Taiwan)
12:04-12:11	Vietnam	Nguyen Canh Chung (Vietnam) Dinh Van Hong (Vietnam)
12:30~	Award & Closing Session	

DAY 1: November 2 (Thu)

Time	Room A (Orchid, 2F)	
12:30-13:30	Luncheon Session 4: Sponsored by Genewel (Orchid, 2F) -Novel Approach of Postoperative Pain Control Using WELPASS® Gel-Form Drug Delivery Kit	Moderator: Kwhanmien Kim (Korea)
12:30-12:50	Gel-Form Poloxamer 407 Enabling Extended Release	Jae Hyun Jeon (Korea)
12:50-13:10	Clinical and Practical Application Video	Yong Won Seong (Korea)
13:30-14:50	A Paradigm Shift in ECPR Following the Inception and Prague Trials?	Moderator: Hyoung Soo Kim (Korea) Yih-Sharng Chen (Taiwan)
13:30-13:45	ECPR: When to Say No	Vincent Pellegrino (Australia)
13:45-14:00	Inception trial, do we need specialized centers for ECPR?	Roberto Lorusso (Netherlands)
14:00-14:15	ED-ECMO program	Su Jin Kim (Korea)
14:15-14:30	Indication of ECPR for IHCA (Korea Experience)	Eui-Suk Chung (Korea)
14:30-14:50	Discussion	Panels: Byuk Sung Ko (Korea), Yonghun Jung (Korea), Wonho Chang (Korea)
14:50-15:10	Break	
15:10-16:30	Cardiogenic Shock: Unresolved Issues Joint Session with Korea Cardiogenic Shock Working Group (심인성쇼크 연구회)	Moderators: Hyeon-Cheol Gwon (Korea) Vincent Pellegrino (Australia)
15:10-15:25	Progressive cardiogenic shock: Which device and when?	Alain Combes (France)
15:25-15:40	Optimal timing of ECMO and revascularization strategy in AMI complicated by CS	Jeong Hoon Yang (Korea)
15:40-15:55	Delivering VA ECMO within a state based ECMO Network	Vincent Pellegrino (Australia)
15:55-16:10	Unloading the Left Ventricle in Venoaerterial ECMO: In Whom, When, and How?	Min-seok Kim (Korea)
16:10-16:30	Discussion	Panels: Min Chul Kim (Korea), Soo Yong Lee (Korea), Ki Hong Choi (Korea), Chul-Min Ahn (Korea)
16:30-16:50	Break	
16:50-18:10	Exit Strategies in Cardiac Failure Joint Session with Korean Society of Heart Failure Surgery (심부전외과학회)	Moderators: Young-Nam Youn (Korea) Pranya Sakiyalak (Thailand)
16:50-17:05	Timing the Transition: ECMO Weaning Failure and Decision to Next Step	Yih-Sharng Chen (Taiwan)
17:05-17:20	Transplantation versus VAD: what is the best evidence?	Yang Hyun Cho (Korea)
17:20-17:35	ECLS Again in post-transplant or VAD	Sung-Ho Jung (Korea)
17:35-17:50	Bridge to nowhere, what can we do?	Glenn Whitman (USA)
17:50-18:10	Discussion	Panels: Ho Young Hwang (Korea), Jae Suk Yoo (Korea), Jung-Hwan Kim (Korea), Jun Sung Kim (Korea)
18:30~	Welcome Ceremony -Grand Intercontinental Seoul Parnas	

DAY 2: November 3 (Fri)		
Time	Room A (Orchid, 2F)	
08:00-09:00	Round-table Discussion on Emerging Issues with Multidisciplinary Experts Sponsored by Abbott Medical Korea	
09:00-10:20	Redefining ARDS and Expanding Boundaries Joint Session with Korean Intensive Care Study Group (집중치료 연구회)	Moderators: Woo Hyun Cho (Korea) Kollengode Ramanathan (Singapore)
09:00-09:15	Mechanical Ventilation during VV ECMO: Lessons learnt	Matthieu Schmidt (France)
09:15-09:30	RV dysfunction in ARDS despite ECMO: How to manage?	Eddy Fan (Canada)
09:30-09:45	VV ECMO weaning : Is there a right way of doing it?	Cara Agerstrand (USA)
09:45-10:00	Prolonged ECMO for ARDS: tips for success	Kyeongman Jeon (Korea)
10:00-10:20	Discussion	Panels: Sunghoon Park (Korea), Won-Young Kim (Korea), Young-Jae Cho (Korea), Bo Kim (USA)
10:20-10:40	Break	
10:40-12:00	Unforgettable case in my experience	Moderators: Palle Palmer (Sweden), Chi-Ryang Chung (Korea)
10:40-10:55	Prolonged ECMO	Palle Palmer (Sweden)
10:55-11:10	ECMO transport	Toshiyuki Aokage (Japan)
11:10-11:25	Rehabilitation	Chi-Ryang Chung (Korea)
11:25-12:00	Interview of ECMO survivor	Pil Sung Kang (Korea), Dong Hyun Kim (Korea) Insang Cho (Korea)
12:00-13:00	Luncheon Session 8: Sponsored by Nihon Kohden Korea (Orchid, 2F)	Moderators: Sang-Hyun Lim (Korea)
12:00-12:45	Predictive analytical tool that provides early warning of a patient's risk for critical events in Smart hospital	Harsh Dharwad (USA)
12:45-13:00	Q&A	
13:00-14:20	Prone Position during ECMO	Moderators: Kyeongman Jeon (Korea) Thomas Müller (Germany)
13:00-13:20	Prone Position doesn't work: Let me clarify! (cons)	Kiran Shekar (Australia)
13:20-13:40	Prone Position definitely works: Let me explain! (pros)	Bishoy Zakhary (USA)
13:40-14:00	Prone positioning during ECMO : Is it safe?	Shay Mc Guinness (New Zealand)
14:00-14:20	Prone positioning during ECMO : Korean Experience	Jinwoo Lee (Korea)
14:20-14:40	Break	
14:40-16:00	Demystifying Septic Shock	Moderators: Sunghoon Park (Korea) Graeme MacLaren (Singapore)
14:40-15:00	What is septic cardiomyopathy? an unresolved enigma	Ki Hong Choi (Korea)
15:00-15:20	Pediatric and adult septic shock: Is there a role for VA ECMO?	Graeme MacLaren (Singapore)
15:20-15:40	How to manage VAV ECMO in septic shock	Bo Kim (USA)
15:40-16:00	ECMO in Immunocompromised patients : Are we pushing the limits?	Matteo Di Nardo (Italy)
16:00-16:20	Break	
16:20-17:40	Recall the COVID pandemic: Lessons learned	Moderators: Myoung-don OH (Korea) Nicholas Barrett (UK)
16:20-16:35	ECMO for COVID-19: evolving outcomes since 2020	Ryan Barbaro (USA)
16:35-16:50	COVID-19 and ECMO: Are Long term functional outcome good? (Korea multicenter study)	Kuk Hui Son (Korea)
16:50-17:05	Allocation of Scarce ECMO Resources in the COVID-19 pandemic	Chenglong Li (China)
17:05-17:20	Post-pandemic, New Standard : How we changed our practice?	Mark Ogino (USA)
17:20-17:40	Discussion	Panels: Jae Bum Kim (Korea), Young Sam Kim (Korea), Kollengode Ramanathan (Singapore), Matthew Paden (USA)
19:00~	Gala Dinner -Floating Island Convention Center (Some Saevit)	

DAY 1: November 2 (Thu)

Time	Room B (Chrysanthemum, 2F)	
12:30-13:30	Lunch	
13:30-14:50	How do I do it ?	Moderators: Hyun-Jai Cho (Korea) Cara Agerstrand (USA)
13:30-13:50	Morbidly obese female (160 kg) for VV ECMO	Priya Nair (Australia)
13:50-14:10	Desaturation on VV ECMO: how low is too low?	Kollengode Ramanathan (Singapore)
14:10-14:30	VA ECMO in pregnancy	Cara Agerstrand (USA)
14:30-14:50	Awake ECMO	Min Ho Ju (Korea)
14:50-15:10	Break	
15:10-16:30	Specialist Session 1. ICU Monitoring and Management	Moderators: Jae Bum Kim (Korea), Sung-Min Cho (USA)
15:10-15:30	Hemodynamic monitoring and patient interaction	Dong Joong Kim (Korea)
15:30-15:50	Ventilator management and patient interaction	Bo Kim (USA)
15:50-16:10	Neurological Monitoring and Prevention of Acute Brain Injury	Sung-Min Cho (USA)
16:10-16:30	Rehabilitation in ECMO patients	Kwan Sik Sung (Korea)
16:30-16:50	Break	
16:50-18:10	Specialist Session 2. Safety Issue in ECMO Patients	Moderators: Sang Hyun Lim (Korea) Sun Hee Lee (Korea)
16:50-17:05	Transport	Sung Jin Bae (Korea)
17:05-17:20	RRT in the ECMO patient	Sun Hee Lee (Korea)
17:20-17:35	Hypoxia on ECMO	Dong Ju Yoon (Korea)
17:35-17:50	Donation after Circulatory Death	Velia Antonini (Italy)
17:50-18:10	Discussion	Joo Jin Park (Korea), Su Hyun Cho (Korea) Suk Ho Lee (Korea)

DAY 2: November 3 (Fri)

Time	Room B (Chrysanthemum, 2F)	
09:00-10:20	ELSO education	Moderators: Seunghwan Song (Korea), Bishoy Zakhary (USA)
09:00-09:20	Using simulation to improve an ECMO program	Hiroshi Kurosawa (Japan)
09:20-09:40	ECMO education and APELSE	Wai Ching Sin (Hong Kong)
09:40-10:00	Global ECMO education : Updates	Bishoy Zakhary (USA)
10:00-10:20	ECMO education in Korea	Seunghwan Song (Korea)
10:20-10:40	Break	
10:40-12:00	Inflammation and Coagulation	Moderators: Ji-Hyuk Yang (Korea), Heidi Dalton (USA)
10:40-11:00	No anticoagulation in VA-ECMO	Heidi Dalton (USA)
11:00-11:20	Best practices for the monitoring of anticoagulation	Grace van Leeuwen (Brazil)
11:20-11:40	Pandora's Box of Oxygenators: A Look at Infection and Inflammation	Keibun Liu (Japan)
11:40-12:00	Cons and Pros: Blood purification device for ECMO patients	Ryoung-Eun Ko (Korea)
12:00-13:00	Luncheon Session 9: Sponsored by Intuitive Surgical Korea (Chrysanthemum, 2F)	Moderator: HyunKoo Kim (Korea)
12:00-12:20	Xi Lobectomy w/ Synchroreal	Bongsoo Son (Korea)
13:00-14:20	Configuring ECMO Modes during Lung Transplantation	Moderators: Jin Gu Lee (Korea) Eddy Fan (Canada)
13:00-13:20	Peripheral VA with PA cannular: does it overcome central support?	Do Hyung Kim (Korea)
13:20-13:40	Central VA ECMO during LT: are outcomes better?	Samina Park (Korea)
13:40-14:00	VV ECMO support during lung transplantation: Decision making and outcomes	Hisashi Oishi (Japan)
14:00-14:20	Personalized ECMO for LT: is it feasible	Hsao-Hsun Hsu (Taiwan)
14:20-14:40	Break	
14:40-16:00	Organizing high quality ECMO program	Moderators: Chang-Hyu Choi (Korea) Joselito Chavez (Philippines)
14:40-15:00	Maintaining resilient ECMO team : Lessons from Pandemic	Peta Alexander (USA)
15:00-15:20	Centralization and regionalization : Does Hub and Spoke model work in Asia Pacific?	Do Wan Kim (Korea)
15:20-15:40	New ECLS program amidst the pandemic: Lessons from Asia Pacific	Eva Marwali (Indonesia)
15:40-16:00	How to setup retrieval team for ECMO?	Keiki Shimizu (Japan)
16:00-16:20	Break	
16:20-17:40	Time to set new standards: Quality improvement in ECMO	Moderators: Hwa Jin Cho (Korea), Rene D. Gomez (Mexico)
16:20-16:40	ELSO registry and Quality improvement	Peter Rycus (USA)
16:40-17:00	Updates on APELSE ECMO Registry	Pauline Yeung Ng (Hong Kong), Prompak Nitayavardhana (Thailand)
17:00-17:20	EXCEL registry: Tips to learn	Priya Nair (Australia)
17:20-17:40	ELSO Universal Center Certification: How to improve quality of ECMO services?	Christine Stead (USA)

DAY 1: November 2 (Thu)

Time	Room C (Rose, 5F)	
13:30-14:50	VV ECMO in Neonatal and Pediatric ECMO Joint Session with Korean Society of Pediatric Critical Care Medicine (소아중환자학회)	Moderators: Won Kyoung Jhang (Korea), Mark Ogino (USA)
13:30-13:45	Pediatric ARDS: conventional treatment and ECMO	Jacqueline Ong (Singapore)
13:45-14:00	Increasing role of VV ecmo in neonates	PP Roeleveld (Netherlands)
14:00-14:15	Novel Cannulation strategy for neonates and children	Jae Gun Kwak (Korea)
14:15-14:30	Prolonged VV ECMO: How long is too long?	Matthew Paden (USA)
14:30-14:50	Discussion	Panels: Joongbum Cho (Korea), Lakshmi Raman (USA) Eva Marwali (Indonesia), Peta Alexander (USA)
14:50-15:10	Break	
15:10-16:30	Surviving Neonatal and Pediatric ECMO: Insights from Patients and Families	Moderators: Woong-Han Kim (Korea), Gail Annich (Canada)
15:10-15:25	Cannulation strategy for Single Ventricle	Michael McMullan (USA)
15:25-15:40	Mechanical circulatory support bridging to transplant	Yu Rim Shin (Korea)
15:40-15:55	Neurologic complications and neuromonitoring of neonatal and pediatric ECMO	Lakshmi Raman (USA)
15:55-16:10	Improving ECMO survivorship	Thomas Brogan (USA)
16:10-16:30	Discussion	Panels: Grace van Leeuwen (Brazil), Matteo Di Nardo (Italy), PP Roeleveld (Netherlands), Ryan Barbaro (USA)
16:30-16:50	Break	
16:50-18:10	ECMO Device: Cutting-Edge Technology	Moderators: Joon Hwa Hong (Korea) Steven Keller (USA)
16:50-17:10	Membrane Technology for Hemocompatible Blood Oxygenation Devices	Jeong Kim (Korea)
17:10-17:30	Bio-endothelium: Time for lateral thinking	Gail Annich (Canada)
17:30-17:50	Functional Zwitterionic Molecules for Non-thrombogenic Artificial Lungs	Sang-Ho Ye (USA)
17:50-18:10	Pulsatile ECMO: Do we need to mimic human physiology?	Yang Hyun Cho (Korea)

DAY 2: November 3 (Fri)

Time	Room C (Rose, 5F)	
09:00-10:20	Best Abstract Presentation (Competition)	Moderators: In-Seok Jeong (Korea)
09:00-09:10	ECMO for COVID-19 acute respiratory distress syndrome: an emulated target trial analysis	Won-Young Kim (Korea)
09:10-09:20	A Promising short-term Mechanical circulatory support (MCS) Approach to Treat Acute Heart Failure (AHF) and Cardiogenic Shock (CS): the First Chinese Clinical Trial to Assess the Efficacy and Safety of MoyoAssist® Extra-VAD System	Ping Li (China)
09:20-09:30	Early Mobilization, Pressure Injuries, and Discontinuation Disposition in Veno-venous Extracorporeal Membrane Oxygenation Therapy	Juaymah Go (USA)
09:30-09:40	Left Ventricular Systolic Unloading by the Percutaneous Counter-pulsation Pump Catheter Under Extracorporeal Membrane Oxygenation Support	Kei Sato (Japan)
09:40-09:50	Nationwide Perspective on ECMO in Hypothermia: Trends and Results	Thomas Jasny (Germany)
09:50-10:00	Impact of Obesity on Neurological Outcomes in Patients Undergoing Venoarterial Extracorporeal Membrane Oxygenation	Jin Kook Kang (USA)
10:00-10:10	Tracheostomy in patients receiving venovenous ECMO for acute respiratory failure: a systematic review and meta-analysis	Yang Lu (Singapore)
10:10-10:20	Clinical Characteristics of Neonatal and Pediatric Extracorporeal Membrane Oxygenation: A 19-year Single-Center Experience	Yoonseo Lee (Korea)
10:20-10:40	Break	
10:40-12:00	ECMO : other perspectives	Moderators: Moo Suk Park (Korea), Nicholas Barrett (UK)
10:40-11:00	Social media and ECMO : pros and cons	Velia Antonini (Italy)
11:00-11:20	ECCO ₂ R : whats the future?	Nicholas Barrett (UK)
11:20-11:40	Organ donation and ECMO: possibilities and problems	Thomas Müller (Germany)
11:40-12:00	ECMO in trauma patients	Erik Osborn (USA)

DAY 3: November 4 (Sat)

Time	Room C (Rose, 5F)	
09:00-10:20	Upcoming Issues in Adult VA-ECMO	Moderators: Hyun-Joong Kim (Korea) Wai Ching Sin (Hong Kong)
09:00-09:20	Dual mechanical support to optimize cardiac state during VA ECMO	Steven Keller (USA)
09:20-09:40	Optimal Cannulation Strategy in ECP	Liangshan Wang (China)
09:40-10:00	Which option will be better after VA-ECMO for acute PTE? embolectomy versus waiting	Kim Bum-Sung (Korea)
10:00-10:20	ECPELLA: Is there lack of evidence still?	Wai Ching Sin (Hong Kong)

DAY 2: November 3 (Fri)

Time	Room D (Carnation, 5F)	
13:00-14:20	Poster Presentation 1	
14:40-16:00	Poster Presentation 2	
16:20-17:40	Oral Presentation (Non-competition)	Sang Bum Hong (Korea)
16:20-16:30	Improving Safety During ECMO Transport by Implementing Mobile tele-ICU	Jun Hamaguchi (Japan)
16:30-16:40	The role of Pediatric ECMO in limited resource center: A retrospective review	Natakorn Harnhathya (Thailand)
16:40-16:50	Do race and gender "matter" on Extracorporeal Membrane Oxygenation (ECMO)?	Weiting Chen (USA)
16:50-17:00	Hemodynamic effect of left ventricular unloading by trans-aortic catheter venting in peripheral veno-arterial extra-corporeal membrane oxygenation for cardiogenic shock: human-sized porcine model of acute hypoxic biventricular dysfunction	Sang Yoon Kim (Korea)
17:00-17:10	Predicting Complications through the Analysis of Blood Flow and Emboli Transport Patterns in Venoarterial Extracorporeal Membrane Oxygenation	Mehrdad Khamooshi (Australia)
17:10-17:20	Clinical Profile and Treatment Outcomes of Patients with Leptospirosis and Acute Respiratory Failure Who Underwent Extracorporeal Membrane Oxygenation at the National Kidney and Transplant Institute – Philippines	Joann Kathleen Garcia (Philippines)
17:20-17:30	Impact of Extracorporeal Life Support for a Refractory Out-of-Hospital Cardiac Arrest: Result from National Sudden Cardiac Arrest Survey	Wan Kee Kim (Korea)