

The 18th Joint Scientific Congress of the JSICM and KSCCM

【Symposium】

Feb 22, 2018 (Thur) 9 : 00 ~ 11 : 00 Room 5 (#301/Makuhari Messe Conference Hall 3F)

Symposium (JKSY) Pediatric airway and lung diseases

Chair Satoshi Nakagawa (National Center for Child Health and Development)

June Dong Park (Seoul National University College of Medicine)

JKSY-1 Lung protective ventilatory strategy guided by pleural pressure

Muneyuki Takeuchi (Department of Intensive Care Medicine, Osaka Women's and Children's Hospital)

JKSY-2 Can high flow nasal cannula oxygen therapy substitute for noninvasive positive pressure ventilation in children?

Norimasa Kurosaka (Department of Pediatric Intensive Care, Nagano Children's Hospital)

JKSY-3 Changing definition of ARDS: Better than before?

Kyung Won Kim (Yonsei University College of Medicine)

JKSY-4 Upper airway problems in PICU

Won Kyoung Jhang (Asan Medical Center Children's Hospital, University of Ulsan College of Medicine)

The 18th Joint Scientific Congress of the JSICM and KSCCM

【Oral Presentation】

Feb 22. 2018 (Thur) 11 : 00 ~ 11 : 50 Room 5 (#301/Makuhari Messe Conference Hall 3F)

Oral 1 (JKO1) Patient management

Chair Moritoki Egi (Department of Anesthesiology, Kobe University Hospital)

Younsuck Koh (Asan Medical Center, University of Ulsan College of Medicine)

- JKO1-1 Rhabdomyolysis induced by hyperthermia associated with thermoregulatory failure in a patient with spinal cord injury
Junki Ishii, Yoshiko Kida, Shinichiro Ohshimo, Yuki Uchida, Yusuke Iwasaki, Kazuhiro Koyama, Satoshi Yamaga, Kohei Ota, Nobuaki Shime (Department of Emergency and Critical Care Medicine, Graduate School of Biomedical & Health Sciences, Hiroshima University)
- JKO1-2 Analysis of the development and progression of carbon monoxide poisoning-related acute kidney injury according to the kidney disease: Improving global outcomes (KDIGO) criteria: A retrospective cohort study
Won Young Kim¹, Youn-Jung Kim¹, Chang Hwan Sohn¹, Dong-Woo Seo¹, Bum Jin Oh¹, Kyoung Soo Lim¹, Jai Won Chang² (1. Department of Emergency Medicine, University of Ulsan College of Medicine, Asan Medical Center, 2. Division of Nephrology, Department of Internal Medicine, University of Ulsan College of Medicine, Asan Medical Center)
- JKO1-3 Risk factors of intensive care unit readmission after liver transplantation: A retrospective observational study
Young Gon Son¹, Hannah Lee¹, Seung Young Oh², Chul-Woo Jung¹, Ho Geol Ryu¹ (1. Department of Anesthesiology, Seoul National University College of Medicine, 2. Department of Surgery, Seoul National University College of Medicine)
- JKO1-4 The early rehabilitation program for liver transplant recipients
Hyunwoo Sun¹, Suk-kyung Hong¹, Nak-jun Choi¹, Hak-jae Lee¹, Jae-seok Lee¹, Sae-rom Park¹, Yun-jung Jung¹, Won Kim² (1. Division of Acute Care Surgery, Ulsan College of Medicine, Asan Medical Center, 2. Department of Surgery, Department of Rehabilitation, Ulsan College of Medicine, Asan Medical Center)
- JKO1-5 Prognostic factors of outcome in pediatric oncology patients with a pulmonary complication
Kyunghoon Kim, Hye Jin Lee, Jong-seo Yoon (Department of Pediatrics, College of Medicine, The Catholic University of Korea)
- JKO1-6 Independent risk factors for the shivering occurrence during induction period in out-of-hospital cardiac arrest survivors treated with targeted temperature management
Youn-Jung Kim¹, Jin Mi Park², Min Soo Kim¹, Seung Mok Ryoo¹, Young Soon Park², Sung Sook Kim², Yeo Ok Kim², Won Young Kim¹ (1. Department of Emergency Medicine, University of Ulsan College of Medicine, Asan Medical Center, 2. Division of Nephrology, Department of Internal Medicine, University of Ulsan College of Medicine, Asan Medical Center)

Feb 22. 2018 (Thur) 15 : 00 ~ 15 : 50 Room 5 (#301/Makuhari Messe Conference Hall 3F)

Oral 2 (JKO2) Circulation

Chair Kent Doi (Department of Acute Medicine, The University of Tokyo)

Jong Hun Jun (Department of Anesthesiology and Critical Care Medicine, Hanyang University Hospital)

- JKO2-1 Postoperative atrial fibrillation induced by Valsalva maneuver after cardiac surgery
Yuki Nakamori, Hiroyuki Mima, Takahiro Shimozono, Hiroshi Ueta, Daisuke Kawakami (Department of Anesthesiology, Kobe City Medical Center General Hospital)
- JKO2-2 B-type natriuretic peptide as a predictor for early and late outcomes after cardiac surgery
Ju Yong Lim, Pil Je Kang, Sung Ho Jung, Suk Jung Choo, Cheol Hyun Chung, Jae Won Lee, Joon Bum Kim (Departments of Thoracic and Cardiovascular Surgery, Asan Medical Center, University of Ulsan College of Medicine)
- JKO2-3 Association of vitamin D and parathyroid hormone with infarction-related arrhythmia in patients with acute myocardial infarction
Jin Wi, Dong-Ho Shin, Jung-Sun Kim, Byeong-Keuk Kim, Young-Guk Ko, Donghoon Choi, Myeong-Ki Hong, Yangsoo Jang (Division of Cardiology, Department of Internal Medicine, Yonsei University College of Medicine)
- JKO2-4 Early start of chest compressions before definitive cardiac arrest improved survival from out-of-hospital cardiac arrest witnessed by emergency medical service
Hideo Inaba¹, Tetsuo Maeda¹, Keisuke Ohta², Yasuhiro Myojo² (1. Department of Circulatory Emergency and Resuscitation Science, Kanazawa University Graduate School of Medicine, 2. Emergency Medical Center, Ishikawa Prefecture Central Hospital)

- JKO2-5 The additive effect of atropine sulfate during cardiopulmonary resuscitation in the out-of-hospital cardiac arrest adult patients with non shockable rhythm
Takao Yano¹, George Endo², Yasuhiro Nagamine², Hidenobu Ochiai³ (1. Department of Emergency Center and Critical Care Medicine, Miyazaki Prefectural Nobeoka Hospital, 2. Department of Emergency Center, Miyazaki Prefectural Nobeoka Hospital, 3. Department of Emergency Center, Miyazaki University Hospital)
- JKO2-6 Benefits of prehospital epinephrine in cases with emergency medical service-performed defibrillation
Hideo Inaba¹, Tetsuo Maeda¹, Keisuke Ohta², Yasuhiro Myojo² (1. Department of Circulatory Emergency and Resuscitation Science, Kanazawa University Graduate School of Medicine, 2. Emergency Medical Center, Ishikawa Prefecture Central Hospital)

Feb 22, 2018 (Thur) 15 : 50 ~ 16 : 40 Room 5 (#301/Makuhari Messe Conference Hall 3F)

Oral 3 (JKO3) Respiration

Chair Masaji Nishimura (Critical Care & Emergency Medicine, Tokushima University Graduate School)

Gee Young Suh (Department of Critical Care Medicine, Director of Center for Critical Care, Division of Pulmonary and Critical Care Medicine, Department of Medicine, Samsung Medical Center, Sungkyunkwan University School of Medicine)

- JKO3-1 Non-invasive ventilation during difficult weaning in chronic critically ill patients
Sung Wook Kang¹, Hee-Young Yoon¹, Sang-Bum Hong¹, Younsuck Koh¹, Chae-Man Lim¹, Hee Jung Suh², Ga Jin Seo², Eun Young Kim², Jin-Won Huh¹ (1. Department of Pulmonary and Critical Care Medicine, Asan Medical Center, University of Ulsan College of Medicine, 2. Respiratory Care Services, Asan Medical Center)
- JKO3-2 Current status of NIV use in Korean ICUs: Interim analysis
Sunghoon Park, Hyeon Seung Nam, Ji Young Park, Seung Hun Jang, Yong Il Hwang, Ki-Suck Jung (Department of Pulmonary, Allergy and Critical Care, Hallym University Sacred Heart Hospital)
- JKO3-3 Risk factors for PICU admission in patients treated with high flow nasal cannula in general wards at a children's hospital
Noboru Matsumoto, Yoshiyuki Shimizu, Yu Inata, Takeshi Hatachi, Kazue Moon, Jun Takeshita, Takaaki Akamatsu, Hiromi Miyoshi, Muneyuki Takeuchi (Department of Intensive Care Medicine, Osaka Women's and Children's Hospital)
- JKO3-4 Role of serum Activin-A levels in ARDS patients
Jee-Min Kim, Sun Mi Choi, Jinwoo Lee, Young Sik Park, Chang Hoon Lee, Jae-Joon Yim, Chul-Gyu Yoo, Young Whan Kim, Sung Koo Han, Sang-Min Lee (Division of Pulmonary and Critical Care Medicine, Department of Internal Medicine, Seoul National University Hospital)
- JKO3-5 Case series: Upper body cannulation VA ECMO in patients waiting for lung transplantation
Kyung Hun Nam¹, Younsuck Koh¹, Chae-Man Lim¹, Jin-Won Huh¹, Sung Ho Jung², Pil-Je Kang², Ju Yong Lim², Sang-Bum Hong¹ (1. Department of Pulmonary and Critical Care Medicine, Asan Medical Center, University of Ulsan College of Medicine, 2. Department of Thoracic and Cardiovascular Surgery, Asan Medical Center, University of Ulsan College of Medicine)
- JKO3-6 The effect of multidisciplinary extracorporeal membrane oxygenation team on clinical outcomes in patients with severe acute respiratory failure
Gee Young Suh¹, Soo Jin Na¹, Chi Ryang Chung¹, Hee Jung Choi², Yang Hyun Cho³, Kiick Sung³, Jeong Hoon Yang¹, Kyeongman Jeon¹ (1. Department of Critical Care Medicine, Samsung Medical Center, Sungkyunkwan University School of Medicine, 2. Center for Intensive Care, Samsung Medical Center, 3. Department of Thoracic and Cardiovascular Surgery, Samsung Medical Center, Sungkyunkwan University School of Medicine)

Feb 22, 2018 (Thur) 16 : 40 ~ 17 : 30 Room 5 (#301/Makuhari Messe Conference Hall 3F)

Oral 4 (JKO4) Basic research/ Infection

Chair Shigeki Fujitani (Department of Emergency and Critical Care Medicine, St. Marianna University School of Medicine)

Chae-Man Lim (Department of Pulmonary and Critical Care Medicine, Asan Medical Center, University of Ulsan College of Medicine)

- JKO4-1 The effect on monocyte with early application of adsorption filter in swine trauma model
Do Wan Kim, Gwan Sic Kim, Kook Joo Na, In Seok Jeong (Department of Thoracic and Cardiovascular Surgery, Chonnam National University Hospital)
- JKO4-2 Recombinant thrombomodulin prevents acute lung injury induced by renal ischemia reperfusion injury
Naoki Hayase, Kent Doi, Takahiro Hiruma, Ryo Matsuura, Eisei Noiri, Yoshifumi Hamasaki, Masaomi Nangaku, Naoto Morimura (Department of Acute Medicine, The University of Tokyo, Department of Nephrology and Endocrinology, The University of Tokyo)

- JKO4-3 Septic serum contains suppressive factor which specifically affects extracellular ATP-dependent inflammasome pathway
Ho Minh Van¹, Nobuyuki Hirohashi¹, Weng-Sheng Kong², Kohei Ota¹, Junji Itai¹, Satoshi Yamaga¹, Kei Suzuki¹, Koichi Tanigawa⁵, Masamoto Kanno^{2,3,4}, Nobuaki Shime¹ (1. Department of Emergency and Critical Care Medicine, Graduate School of Biomedical and Health Sciences, Hiroshima University, 2. Department of Immunology, Graduate School of Biomedical and Health Sciences, Hiroshima University, 3. Japanese Agency for Medical Research and Development - Core Research for Evolutionary Science and Technology, 4. Japanese Agency for Medical Research and Development - Core Development of Advanced Measurement and Analysis Systems, 5. Fukushima Global Medical Science Centre, Fukushima Medical University)
- JKO4-4 Nonpulmonary organ failures and the development of acute respiratory distress syndrome in patients with bacteremia sepsis
Hyeon Seung Nam, Sunghoon Park, Ji Young Park, Seung Hun Jang, Ki-Suck Jung (Department of Pulmonary, Allergy and Critical Care, Hallym University Sacred Heart Hospital)
- JKO4-5 Clinical outcomes after initial treatment of methicillin-resistant *Staphylococcus aureus* infections
Nobuaki Shime^{1,2}, Nobuyuki Saito², Miya Bokui², Naoki Sakane², Mitsuhiro Kamimura², Tsutomu Shinohara², Tadashi Kosaka², Hisashi Ishikura², Atsuko Kobayashi² (1. Hiroshima University, 2. The PORTRAIT study group)
- JKO4-6 Central line-associated complications in critically ill children: a comparison between peripherally inserted central catheters and central venous catheters
Hiromi Miyoshi, Yoshiyuki Shimizu, Jun Takeshita, Takeshi Hatachi, Yu Inata, Kazue Moon, Muneyuki Takeuchi (Department of Intensive Care Medicine, Osaka Women's and Children's Hospital)

【Poster Presentation】

Feb 22, 2018 (Thur) 14 : 00 ~ 14 : 50 Makuhari Messe Conference Hall 3F Atrium

Poster 1 (JKP1)

Chair Masaji Nishimura (Critical Care & Emergency Medicine, Tokushima University Graduate School)

Dong-Chan Kim (Department of Anesthesiology & Pain Medicine, Chonbuk National University Medical School & Hospital)

- JKP1-1 In vivo diagnosis of hemorrhage in blunt lung contusion model using fluorescence imaging
Taegyun Kim, Gil Joon Suh, Woon Yong Kwon, Kyung Su Kim, Yoon Sun Jung, Jung-In Ko, So Mi Shin (Division of Critical Care Medicine, Department of Emergency Medicine, Seoul National University Hospital)
- JKP1-2 The effects of melanocortin rc agonist BMS-470539 on immune-inflammatory response in septic neutrophil and mortality in septic mouse
Euna Jang¹, Jia Song¹, Tran Duc Tin², Hongbum Bae¹, Joungmin Kim¹, Sanghyun Kwak^{1,2} (1. Department of Anesthesiology and Pain Medicine, Chonnam National University Medical School & Hospital, 2. Brain Korea 21 Project, Center for Creative Biomedical Scientists at Chonnam National University)
- JKP1-3 An octogerian patient with acute myocardial infarction complicating cardiogenic shock
Go Ishimaru, Kenji Koura, Emiko Nakashima, Kentaro Onishi, Hiroyuki Okada, Hiroshi Inagaki, Nobuo Toshida, Toshihiko Takamoto (Soka Municipal Hospital)
- JKP1-4 Physiotherapist detects masquerading late laryngotracheal stenosis after cardiovascular surgery: a case report
Masato Nishizaki¹, Yasuhisa Okamoto² (1. Department of Rehabilitation, Otakanomori Hospital, 2. Department of Anesthesiology, Otakanomori Hospital)
- JKP1-5 Bladder tamponade in a patient with cognitive disorder receiving direct oral anticoagulant
Go Ishimaru, Kenji Koura, Emiko Nakashima, Kentaro Onishi, Hiroyuki Okada, Hiroshi Inagaki, Nobuo Toshida, Toshihiko Takamoto (Soka Municipal Hospital)
- JKP1-6 Successful rescue of patients with aortic stenosis falling to cardiac arrest by using extracorporeal membrane oxygenation: A case report
Kento Fukui¹, Tomoko Tomioka¹, Yoshitaka Ito¹, Hiroki Shioiri¹, Jiro Koyama¹, Satoshi Tsuchiya², Yasuharu Matsumoto², Kanichi Inoue¹ (1. Department of Cardiology, South-Miyagi Medical Center, 2. Department of Cardiovascular Medicine, Tohoku University Graduate School of Medicine)
- JKP1-7 Relationship between physical characteristics and external pressure to calf region using boot-support-type leg holder system in the middle lithotomy position
Ju Mizuno¹, Toru Takahashi² (1. Department of Anesthesiology and Pain Medicine, Juntendo University Faculty of Medicine, 2. Faculty of Health and Welfare Science, Okayama Prefectural University)

Feb 22. 2018 (Thur) 14 : 00 ~ 14 : 50 Makuhari Messe Conference Hall 3F Atrium
Poster 2 (JKP2)

Chair Takanari Ikeyama (Division of Pediatric Critical Care Medicine, Aichi Children's Health and Medical Center)
Sung Jin Hong (Catholic University of Korea College of Medicine)

- JKP2-1 Relative tachycardia is associated with poor neurologic outcome in post-cardiac arrest patients
Jung-In Ko¹, Kyung Su Kim¹, Gil Joon Suh^{1,4}, Woon Yong Kwon^{1,4}, Taegyun Kim¹, Kyuseok Kim^{2,4}, Jonghwan Shin^{3,4}, You Hwan Jo^{2,4} (1. Department of Emergency Medicine, Seoul National University Hospital, 2. Department of Emergency Medicine, Seoul National University Bundang Hospital, 3. Department of Emergency Medicine, Seoul Metropolitan Government-Seoul National University Boramae Medical Center, 4. Department of Emergency Medicine, College of Medicine, Seoul National University)
- JKP2-2 Correlation between saturation of brain tissue with near-infrared spectroscopy and ROSC in ambulance among out-hospital-cardiac arrest patients
Junpei Tsukuda, Yasuhiko Taira, Kentaro Okamoto, Takeshi Kawaguchi, Takaki Naito, Nobuhiko Simozawa, Kenichiro Morisawa, Shigeki Fujitani (Emergency and critical care medicine, St. Marianna University School of Medicine)
- JKP2-3 Prevention of CLABSI by quality improvement activity
Jung Hyun Lee, Youngok Kwon, Kyung Su Kim, Ga Young Um, Yoon Ah Woo, Ji Hyun Kim, Bo Ram Oh, Eun Jin Kim, Pyoeng Gyun Choe, Eun-Hee Jung (Seoul National University Hospital)
- JKP2-4 Comparison between transverse and vertical skin incision in percutaneous dilatational tracheostomy
Sung Yoon Lim¹, Seung-Hye Choi², Yeon Joo Lee¹, Ho Il Yoon¹, Jae Ho Lee¹, Choon-Taek Lee¹, Young-Jae Cho¹ (1. Division of Pulmonary and Critical Care Medicine, Department of Internal Medicine, Seoul National University Bundang Hospital, 2. Department of Nursing, Semyung University)
- JKP2-5 Clinical usefulness of SpO₂/FiO₂ ratio in children with high-flow nasal cannula
Sun Ha Choi, Soo Yeon Kim, In Suk Sol, Yoon Hee Kim, Kyung Won Kim, Myung Hyun Sohn (Department of Pediatrics, Institute of Allergy, Brain Korea 21 PLUS Project for Medical Science, Yonsei University College of Medicine)
- JKP2-6 Risk of mortality associated with human coronaviruses in adults
Won-Il Choi (Keimyung University Dongsan Hospital)
- JKP2-7 Multidisciplinary rounds shorten ICU length of stay in a Japanese university tertiary hospital
Nobuhiro Shiota, Sachiyo Sato, Kenji Wakabayashi, Marie Tanaka, Yoko Tsukada, Mizuho Asada, Hidenobu Shigemitsu (Department of Critical Care Medicine, Tokyo Medical and Dental University)

Feb 22. 2018 (Thur) 14 : 00 ~ 14 : 50 Makuhari Messe Conference Hall 3F Atrium
Poster 3 (JKP3)

Chair Yuri Sakaki (Nippon Medical School Hospital)
Suk-Kyung Hong (Division of Acute Care Surgery, Department of Surgery, University of Ulsan College of Medicine, Asan Medical Center)

- JKP3-1 Is it hard law or soft law? – End-of-life care in Japan
Motoshi Kainuma (Executive Supervisor of Anesthesiology, Emergency Medicine, and Intensive Care Division, Inazawa Municipal Hospital)
- JKP3-2 Intensive care unit (ICU) nurses' death awareness, end-of-life stress and end-of-life nursing attitudes
Sera Kim¹, Mee Jin No¹, Hee Ju Cho¹, Young Park¹, Kyung Eun Moon¹, Soon Haeng Lee¹, Mi Young Shim² (1. Asan Medical Center, 2. Seoul National University Hospital)
- JKP3-3 Improving patient and family's understanding by using video when making decision about cardiopulmonary resuscitation (CPR) and discontinuing life-sustaining treatment
Youngmi Lee, Sookhyun Park, Geeyoung Suh, Misook Oui, Sunmi Park, Soojin Jeong, Soowon Jung, Chulhyun Kim (Medical Intensive Care Unit, Samsung Medical Center)
- JKP3-4 Nurses' experiences and educational needs regarding advance directives writing
Ga Young Um (Seoul National University Hospital)
- JKP3-5 The effects of facilitated sense-making intervention program for ICU family
Mimi Lee¹, Myungsun Lee², Miok Park¹, Hana Kim¹, Jinhee Yang¹ (1. Department of Nursing, Seoul National University Hospital, 2. Seoul National University College of Nursing)
- JKP3-6 Multidimensional factors influencing on burnout of intensive care unit nurses
Sera Kim, Jin Hee Hwang, Ae Ran, Soon Haeng Lee, Mi Kyung Jeon (Asan Medical Center)
- JKP3-7 Development of nursing skill through procedure simulation in the Intensive care units
Jin-young Nam, Kyungmin Shin, Kyunghea Lee, Sunyoung Kim, Sunghye Kim, Hana Bang, Junghwa Hwang (Severance Cardiovascular Hospital, Coronary Care Unit)

Chair Yu Inata (Department of Intensive Care Medicine, Osaka Women's and Children's Hospital)
Sungwon Na (Yonsei University College of Medicine)

- JKP4-1 Drug related serious adverse events that activated rapid response team
Jeongsu Kim^{1,2}, Sanghun Jung², Minjeong Kim², Mihwa Park², Jaehyeon Park¹, Jinhee Jang¹, Heegyeong Cho¹, Jaehwa Cho^{1,2} (1. Department of Hospital Medicine, Inha University Hospital, 2. Department of Pulmonary and Critical Care, Inha University Hospital)
- JKP4-2 Neutrophil-lymphocyte ratio and delirium in critically ill patients
Se Hee Na, Cheung Soo Shin (Yonsei University College of Medicine, Gangnam Severance Hospital, Department of Anesthesiology and Pain Medicine)
- JKP4-3 The effects of a delirium notification program of IDDM project on the clinical outcomes of the intensive care unit
Soo-Jeong Kim^{1,2}, Jaesub Park^{1,2}, Seung-Taek Oh¹, Jae-Jin Kim^{1,2}, Cheung Soo Shin³, Se Hee Na³, Jin Young Park^{1,2} (1. Department of Psychiatry and Institute of Behavioral Science in Medicine, Yonsei University College of Medicine, 2. Department of Psychiatry, Gangnam Severance Hospital, Yonsei University Health System, 3. Department of Anesthesiology and Pain Medicine, College of Medicine, Yonsei University)
- JKP4-4 Development of an evidence-based protocol for delirium management in intensive care unit
Na Ra Sin¹, Seon Gyeong Choe¹, Eun Kyoung Kim¹, Ji Eun Hong¹, Jung Yoen Kim¹, Eun Sung Kim¹, Pill Ja Kim¹, Yeon Soo Jang², Young Sam Kim³, Jeong Min Kim⁴ (1. Division of Nursing, Severance Hospital, Yonsei University Health System, 2. College of Nursing, Nursing Policy Research Institute, Yonsei University, 3. Division of Pulmonology, Department of Internal Medicine, Institute of Chest Disease, Severance Hospital, Yonsei University College of Medicine, 4. Department of Anesthesiology and Pain Medicine, Anesthesia and Pain Research Institute, Yonsei University College of Medicine)
- JKP4-5 Difficulties in trauma nursing experienced by expert nurses working in the critical care field in Japan
Koji Ishikawa¹, Natsuko Makino², Keiko Nakamura³, Miki Sugawara⁴ (1. Faculty of Health Sciences, Hokkaido University of Science, 2. Nursing Department, School of Health Sciences, Sapporo Medical University, 3. Graduate School of Nursing, Sapporo City University, 4. School of Nursing, Sapporo City University)
- JKP4-6 Translated two assessment tools using multidisciplinary back-translation method
Yujiro Matsuishi, Haruhiko Hoshino, Nobutake Shimojo, Yuki Enomoto, Takahiro Kido, Tetsuya Hoshino, Yoshiaki Inoue (Department of Emergency and Critical Care Medicine, Faculty of Medicine, University of Tsukuba)
- JKP4-7 Development of evidence-based guideline for fever management of critical adult patients with brain injury
Jung Min Lee¹, Yong Ae Cho², Ji Hyun Yoon³, Hye Ok Choi³, Nam Cho Kim⁴ (1. Department of Nursing, Samsung Medical Center, College of Nursing, The Catholic University of Korea, 2. Red Cross College of Nursing, Chung-Ang University, 3. Department of Nursing, Samsung Medical Center, 4. College of Nursing, The Catholic University of Korea)