

6th Japanese Safety Pharmacology Society (JSPS) Annual Meeting

Program (FINAL)

Date: February 20 (Fri) -21 (Sat), 2015

Venue: The University of Tokyo, Yayoi Auditorium, Ichijo Hall / Annex Seihoku Gallery President: Mitsuyasu Tabo (Chugai Pharmaceutial Co., Ltd.)

Day 1 (February 20th)

10:00 - 17:00 Poster Sessions (Annex Seihoku Gallery)

9:50 - 10:00 Opening

Opening remarks (Mitsuyasu Tabo, President of 6th Annual Meeting)

10:00 - 11:50 Symposium 1 [Cardiovascular system] (Yayoi Auditorium, Ichijo Hall) Moving from QT risk to the actual pro-arrhythmia risk evaluation

Moderator: Katsuyoshi Chiba (DAIICHI SANKYO CO., LTD.), Tomoharu Osada (LSI Medience Corp.)

- Comprehensive in vitro cardiac safety assessment using human stem cell technology (CSAHi: HEART)
 - Kiyoshi Takasuna (Medicinal Safety Research Laboratories, DAIICHI SANKYO CO., LTD.)
- 2. *In silico* risk assessment of drug-induced arrhythmia using the multi-scale heart simulator 'UT-Heart' Seiryo Sugiura (Graduate School of Frontier Sciences, The University of Tokyo)
- Proarrhythmic risk assessment in preclinical and modeling approach in clinical pharmacology
 Mikiko Nakamura (Clinical Research Planning Dept. Clinical Div., Chugai Pharmaceutical Co., Ltd.)

12:10 - 13:10 Luncheon Seminar 1 (Faculty of Agriculture, building number 1st)

- Improvement of the cardiovascular evaluation in general toxicity study ~An approach using the JET system~
 - Junko Taketo, Ryuichi Komatsu (Research Division, Chugai Pharmaceutical Co., Ltd.) (Sponsored by Primetech corporation)
- Human iPS cell-derived tissue cells and applications for the drug discovery Hideo Saotome (Product Development & Operations, iPS PORTAL, Inc.) (Sponsored by iPS PORTAL,Inc.)

13:30 -14:30 Educational Lecture (Yayoi Auditorium, Ichijo Hall)

Moderator: Mitsuyasu Tabo (Chugai Pharmaceutial Co., Ltd.)

Pharmacological research using stem cell-derived cardiac myocytes; From basic background to pharmaceutical applications

Junko Kurokawa (Dept. Bio-inform., Medical Research Institute, Tokyo Med. Dent. Univ.)

14:45 - 16:35 Oral Session (Yayoi Auditorium, Ichijo Hall)

Moderator: Hiroyuki Tashibu (Ina Research Inc.), Hiroyuki Ando (Ono Pharmaceutical Co., Ltd.)

- Challenges in detection of premonitory electroencephalographic (EEG) changes of drug-induced seizure using a non-human primate EEG model
 - Motohiro Shiotani (Tsukuba Drug Safety, Global Drug Safety, Biopharmaceutical Assessments Core Function Unit, Eisai Co., Ltd.)
- 2. A subject NOT permitted to publish on Web program
- Effects of class I antiarrhythmic drugs on the electrical excitation and conduction in the human iPS
 cell-derived cardiomyocyte sheet
 - Hiroko Izumi-Nakaseko (Department of Pharmacology, Faculty of Medicine, Toho University)
- Multi-spheroid imaging analysis of human induced pluripotent stem cell-derived cardiomyocyte by Cellvoyager CV7000 system for the assessment of in vitro cardiotoxicity

Tadashi Nagakura (Global CV Assessment Unit, Tsukuba Research Laboratory, Eisai Co., Ltd.)

Moderator: Harushige Ozaki (Takeda Pharmaceutical Company Limited), Akihiro Kanno (Drug Safety Testing Center Co., Ltd.)

- 5. Utility of halothane-anesthetized guinea pig as a model to assess the drug-induced QT-interval prolongation: why can *dl*-sotalol prolong the QT interval in vivo despite its weak inhibitory effect on hERG K⁺ channels in vitro?
 - Jun Katagi (Department of Pharmacology, Faculty of Medicine, Toho University)
- Apomorphine does NOT induce long QT syndrome: experimental evidence from in vivo canine models
 - Yudai Watanabe (Department of Pharmacology, Faculty of Medicine, Toho University)
- 7. Electropharmacological effects of a selective EP4-receptor stimulation by ONO-AE1-329 assessed by the halothane-anesthetized canine model
 - Hiroaki Nomura (Department of Pharmacology, Faculty of Medicine, Toho University)

16:50 - 17:50 Overseas Invited Speakers (Yayoi Auditorium, Ichijo Hall)

Moderator: Kohei Sawada (Eisai Co., Ltd.)

The cardiac in vitro proarrhythmia Initiative (CiPA): goals, progress, and paths forward Gary Gintant (AbbVie Inc.)

18:30 - Banquet Party (Sanjo Conference Hall)

Day 2 (February 21st)

9:00 - 15:00 Poster Sessions (Annex Seihoku Gallery)

Poster Discussion (11:00 - 12:20)

9:00 - 10:50 Symposium 2 [Central nervous system] (Yayoi Auditorium, Ichijo Hall)

Frontline of CNS research

Moderator: Seiji Hayashi (Nippon Shinyaku Co., Ltd.), Yoshiki Deguchi (Shin Nippon Biomedical Laboratories, Ltd.)

- Optogenetics and pharmacogenetics to reveal regulatory mechanism of instinctive behaviors Akihiro Yamanaka (Dept. Res. Inst. Env. Med., Nagoya Univ.)
- 2. Large-scaled network reorganization during recovery from partial spinal cord injury Tadashi Isa (National Institute for Physiological Sciences)
- Challenges towards stem cell therapy for Parkinson's disease
 Jun Takahashi (Center for iPS Cell Research and Application, Kyoto University)

12:30 - 13:30 Luncheon Seminar 2 (Faculty of Agriculture, building number 1st)

- Assessing cardiac liability using hiPS-derived Cor.4U cardiomyocytes in the xCELLigence RTCA Cardio and CardioECR
 - v Haniel F (Axiogenesis AG), Xiaoyu Z (ACEA Biosciences)
 - (Sponsored by Scrum Inc./ACEA Biosciences Inc.)
- Evaluation of behavior in safety pharmacology: a way to translational research
 Naoyuki Hironaka (Pharmacology Dept., Drug Development Service Segment, LSI Medience Corp.)
 (Sponsored by LSI Medience Corp.)

14:00 - 15:30 Workshop (Yayoi Auditorium, Ichijo Hall)

Future vision of QT and pro-arrhythmia risk assessment in drug discovery

Moderator: Takashi Yoshinaga (Eisai Co., Ltd.), Yoshiko Okai (Takeda Pharmaceutical Co., Ltd.)

- 1. How should we practically use *in vitro/in silico* cardiac safety assessment for evaluating the pro-arrythmia risk of new drugs?
 - Taeko Kubo (Preclinical Research Laboratories, Sumitomo Dainippon Pharma Co., Ltd.)
- 2. How to use *in vivo* ECG data and evaluate the pro-arrhythmia risk with *in vitro/silico* data in drug discovery?
 - Masaki Honda (Research Division, Chugai Pharmaceutical Co., Ltd.)
- 3. Panel Discussion

16:00 - 17:00 Safety Pharmacology Q&A (Yayoi Auditorium, Ichijo Hall)

Moderator: Chieko Kasai (Astellas Pharma Inc.), Hiroshi Yokoyama (Nippon Kayaku Co., Ltd.)

17:00 - Closing (Yayoi Auditorium, Ichijo Hall)

JSPS award ceremony (Mitsuyasu Tabo, Selection Chairman) Closing remarks (Seiji Hayashi, President of 7th Annual Meeting)