日本安全性薬理研究会
Japanese Safety Pharmacology Society

Poster sessions

1. Intravenous self-administration of ketamine and propofol in rats

○Atsushi FUJIWARA, Masahiko IINO, Miki SHIMOSAWA, Shin-ichi SATO
Ina Research Inc.

2. Age-dependent alterations in cardiovascular parameters in rats

○Tomoya TASAKA, Katsuyuki KAZUSA, Takafumi SHIRAKAWA, Kiyoshi TADANO
Drug Safety Research Laboratories, Astellas Pharma Inc.

3. Investigation of individual analysis of QT interval in beagle dogs.

○Fuminori MATSUBARA[1)], Kazuhide OKADA[1)], Souji MIYAZAKI[1)], Noriko HASHIGUCHI[1)], Masaru TSUBOI[1)], Koji NAKANO[1)], Akihiro KANNO[1)], Katsuyuki KAZUSA[2)], Kiyoshi TADANO[2)], Tomoya TASAKA[2)], Takafumi SHIRAKAWA[2)], Chieko KASAI[2)]
1) Drug Safety Testing Center Co., Ltd.
2) Astellas Pharma Inc.

4*. The anesthetized rabbit with acute atrioventricular block is more sensitive for detection of proarrhythmic potential of drugs than well-known model of the methoxamine-sensitized rabbit

○Mihoko HAGIWARA-NAGASAWA[1),2)], Seiji SHIBUTA[1)], Kazuhiro TAKADA[1)], Ryuichi KAMBAYASHI[1)], Misako NAKAJO[1)], Megumi AIMOTO[1)], Yoshinobu NAGASAWA[1)], Akira TAKAHARA[1)]
1) Department of Pharmacology and Therapeutics, Faculty of Pharmaceutical Sciences, Toho University
2) Department of Pharmacology, Faculty of Medicine, Toho University

5. Comparison of QT interval under halothane and isoflurane inhalation anesthesia in dogs

○Hiroyuki SAITO, Kiyotaka HOSHIAI, Yasuki AKIE
CMIC Pharmascience Co., Ltd.

6. Analysis of safety margin of lithium carbonate against cardiovascular adverse events assessed in the halothane-anesthetized dogs

○Ai GOTO[1)], Yuji NAKAMURA[2)], Mihoko HAGIWARA-NAGASAWA[2)], Nur Jaharat LUBNA[1)], Koki CHIBA[1)], Hiroko IZUMI-NAKASEKO[1),2)], Kentaro ANDO[1),2)], Atsuhiko T. NAITO[1),2)], Atsushi SUGIYAMA[1),2)]
1) Department of Pharmacology, Toho University Graduate School of Medicine
2) Department of Pharmacology, Faculty of Medicine, Toho University

7. Evaluation of activity parameter for next-generation telemetry transmitter

○Katsuhiko SAKAI, Yoshiharu TSURU
Application Support Dept., Primetech Co., Ltd.

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8*. Cardiac tissue-specific evaluation for contractile function of hiPS-derived cardiomyocytes

○Yui SUZUKI[1)], Yusuke SANO[1)], Masami KODAMA[2)], Yasunari KANDA[3)], Masahiko YAMAGUCHI[1)], Kazuho SAKAMOTO[1)], Tetsushi FURUKAWA[2)], Junko KUROKAWA[1),2)]
1) Univ. Shizuoka, Sch. Pharmaceutical Sciences
2) Tokyo Medical and Dental Univ., Medical Research Institute
3) National Institute of Health Science, Div., Pharmacology

9*. Contractile force measurement of human iPS cell-derived cardiomyocyte sheet-tissues for drug testing

○Daisuke SASAKI[1)], Katsuhisa MATSUURA[1)], Yuji HARAGUCHI[1)], Yuki KAGAWA[2)], Takahiro SHIOYAMA[2)], Hirotsugu KUBO[2)], Tatsuya SHIMIZU[1)]
1) Institute of Advanced Biomedical Engineering and Science, Tokyo Women's Medical University
2) Nihon Kohden Corporation

10. CSAHi study: Identification of CV liabilities with simultaneous measurement of impedance and field potential using human iPSC-derived cardiomyocytes

○Katsuyuki KAZUSA[1),5)], Yumiko SATO[2)], Ayumi NAKATA[2)], Atsuhiro YAMANISHI[3)], Hisashi NOGAWA[3),5)], Junko SHINOZAKI[3)], Toru HATTORI[4),5)], Hidenori HIRANUMA[4),5)]
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2) Drug Safety Research Div., Astellas Research Technologies Co., Ltd.
3) Toxicology Research Laboratory, Kyorin Pharmaceutical Co., Ltd.
4) Strategic Marketing Division, Scrum Inc., 5) Consortium for Safety Assessment using Human iPS Cells (CSAHi)

11. Functional maturation of human iPSC-derived cardiomyocytes and assessment of inotropic compounds

○Xiaoyu ZHANG, Yama A. ABASSI
ACEA Biosciences Inc.

12. Applications (*in vitro* TdP model and impedance based assay) of MiraCell® Cardiomyocytes (from ChiPSC12)

○Toshikazu NISHIE[1)], Rina TANAKA[1)], Yasuhiro TOSAKA[1)], Sachiko OKAMOTO[1)], Masahide KAWATOU[2)], Hidetoshi MASUMOTO[2)], Tatsuji ENOKI[1)], Jun K YAMASHITA[2)], Junichi MINENO[1)]
1) CDM center, TAKARA BIO. INC.
2) Laboratory of Stem Cell Differentiation, Department of Cell Growth & Differentiation, Center for iPS cell research and application (CiRA), Kyoto University

13. Novel high content analysis system of Ca^{2+} transient of cardiomyocytes during electrical pacing

○Hiroyuki KYUSHIKI, Noritaka KOSEKI
Biology and Translational Research Unit, Dept. of Medical Innovations, New Drug Research Division, Otsuka Pharmaceutical Co., Ltd.

14. Voltage and calcium sensitive dye recording from hiPSC-derived cardiomyocytes using the Hamamatsu FDSS plate reader for cardiac safety assessment in 96 well format

S. BEDUT[1)], F. COGE[1)], B. LOCKHART[1)], ○R. KETTENHOFEN[2)]
1) Servier Research Institute, Biotechnologies Center of Excellence, Croissy-sur-Seine, France
2) Ncardia AG, Cologne, Germany

15. Recent advances in high-throughput automated patch clamp system: application to safety pharmacology

○Mitsuyoshi SHIMANE, Takayuki OKA, Atsushi OHTSUKI
Nanion Technologies Japan K.K.

16. Voltage and current clamp recordings from human iPS cell-derived cardiomyocytes on 384-channel automated patch-clamp system

○Kazuya TSURUDOME[1)], Daniel R. SAUTER[2)], Rasmus B. JACOBSEN[2)], Yuji TSURUBUCHI[1)]
1) Sophion Bioscience K.K.
2) Sophion Bioscience A/S

17. Cardiac multiple ion channel screening at DAIICHI SANKYO RD NOVARE: Necessity and future challenges

○Masafumi DOI, Kiyoshi TAKASUNA, Kohichi KAKIMI, Tomoko SASAKI, Masako SAKAI, Nobuyuki MURAYAMA
Discovery Pharmacokinetics Research Group, Pharmaceutical and Biomedical Analysis Dept., DAIICHI SANKYO RD NOVARE CO., LTD.

18. Safety pharmacological approach for proarrhythmic risk prediction using IQ-CSRC drugs (I): Patch-clamp study

○Hiroshi MATSUKAWA, Koji NAKANO, Mao YAMAGUCHI, Hironori OHSHIRO, Satomi TOMIZAWA, Rie URA, Taku IZUMI, Fuminori MATSUBARA, Masaru TSUBOI, Kazuhide OKADA, Noriko HASHIGUCHI, Souji MIYAZAKI, Akihiro KANNO
Drug Safety Testing Center, Co., Ltd.

19. Safety pharmacological approach for proarrhythmic risk prediction using IQ-CSRC drugs (II): Langendorff study

○Koji NAKANO, Fuminori MATSUBARA, Masaru TSUBOI, Kazuhide OKADA, Noriko HASHIGUCHI, Souji MIYAZAKI, Mao YAMAGUCHI, Satomi TOMIZAWA, Rie URA, Taku IZUMI, Hironori OHSHIRO, Hiroshi MATSUKAWA, Akihiro KANNO
Drug Safety Testing Center Co., Ltd.

20*. High-content imaging analysis for detecting the status of synapses in cultured hippocampal neurons

○Kenji HANAMURA[1)], Noriko KOGANEZAWA[1)], Yuko SEKINO[2)], Tomoaki SHIRAO[1)]
1) Department of Neurobiology and Behavior, Gunma University Graduate School of Medicine
2) Laboratory of Chemical Pharmacology, Graduate School of Pharmaceutical Sciences, The University of Tokyo

21*. Spontaneous activity and drug responsiveness depending on the ratio of excitatory/inhibitory neurons in human iPSC-derived neurons

○Remi YOKOI[1)], Aoi ODAWARA[1),2),3)], Naoki MATSUDA[1)], Ikuro SUZUKI[1),4),5)]
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22*. Periodicity analysis and principal component analysis of the electrical activity in cultured human iPS cell-derived neurons for the prediction of convulsive toxicity and action mechanisms of drugs

○Yuto ISHIBASHI[1)], Aoi ODAWARA[1),2),3)], Natuki OKUYAMA[1)], Ai OKAMURA[4)], Kenichi KINOSHITA[4)], Takafumi SHIRAKAWA[4),6)], Ikuro SUZUKI[1),5),6)]
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23*. Response evaluation to convulsant and anticonvulsant drugs in human induced pluripotent stem cell-derived cortical neuronal networks using an MEA system

Aoi ODAWARA[1),2),3)], Naoki MATSUDA[1)], Yuto ISHIBASHI[1)], Remi YOKOI[1)], ○Ikuro SUZUKI[1),4),5)]
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24*. Development of the detection method of synchronized burst firings in MEA data of human iPSC-derived neurons

○Natsuki OKUYAMA[1)], Naoki MATSUDA[1)], Aoi ODAWARA[1),2),3)], Ai OKAMURA[4)], Kenichi KINOSHITA[4)], Takafumi SHIRAKAWA[4),6)], Ikuro SUZUKI[1),5),6)]
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25*. Development of carbon nanotube multi-electrode array that enables real-time measurement of dopamine release

○Naoki MATSUDA[1)], Aoi ODAWARA[1),2),3)], Ikuro SUZUKI[1),4),5)]
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26*. Artificial intelligence analysis of the electrical activity in cultured human iPS cell-derived neurons for the prediction of convulsive toxicity and action mechanisms of drugs

○Naoki MATSUDA[1)], Aoi ODAWARA[1),2),3)], Ai OKAMURA[4)], Kenichi KINOSHITA[4)], Takafumi SHIRAKAWA[4),6)], Ikuro SUZUKI[1),5),6)]
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27. Evaluation of pain responses in human iPSC-derived sensory neurons using MEA system

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28. Development of a deep learning algorithm for synchronized activity detection in MEA data from human induced pluripotent stem cell-derived neurons

○Norimasa MIYAMOTO[1)], Atsuko OJIMA[1),2)], Tetsuo KITAMURA[3)], Tomoharu OSADA[4)], Tadashi KADOWAKI[5)], Takashi YOSHINAGA[1)]
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2) Bio Medical Technology HYBRID Co., Ltd.
3) Kashima Safety Assessment Department B, Nonclinical Research Center, LSI Medience Corporation
4) Advanced Medical Business Development Department, LSI Medience Corporation
5) Data Science Laboratory, hhc Data Creation Center, Eisai Co., Ltd.

29. Integrative assessment of networked electrical activity using induced pluripotent stem cell-derived gluta neuron co-cultures

○Blake D. ANSON
Cellular Dynamics International, Inc.

30. Depelopment of an *in silico* simulation tool for evaluation of drug-induced proarrhythmic risk: eDIA tool

○Ryuta SAITO[1),2)]
1) iSmart, Japanese Safety Pharmacology Society
2) Discovery Technology Labs., Sohyaku. Innovative Research Division, Mitsubishi Tanabe Pharma Corporation

31. A quantitative systems pharmacological study for risk assessment of astemizole-induced proarrhythmia

○Mikiko NAKAMURA[1),2)], Tsuyoshi MINEMATSU[1),3)], Yoshimi KATAYAMA[1),4),5)], Hiroshi MATSUKAWA[1),4)], Ryuta SAITO[1),6)]
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5) Pharmaceutical Research Dept., Biological Research Labs., Nissan Chemical Industries, Ltd.
6) Discovery Technology Labs., Sohyaku, Innovative Research Division, Mitsubishi Tanabe Pharma Corporation

32. The simulation study of the effect of extracellular ion concentrations and ion channels inhibitions on the action potential duration and its reverse rate dependency in the I_{Kr} channel modified O'Hara Rudy model

○Yasuyuki ABE[1),2)], Yoshiyuki FURUKAWA[1),3)], Yuki OHYABU[1),4)], Hiroyuki ANDO[1),5)], Tatsuya MAEKAWA[1),6)]
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4) Kaken Pharmaceutical Co., Ltd.
5) Ono Pharmaceutical Co., Ltd.
6) Japan Tobacco Inc.

Note: Posters given odd and even numbers are displayed on Friday, February 9th and on Saturday, February 10th, respectively. Posters participated in the award for excellence of research presentation are indicated by an asterisk (*****) and displayed each day.