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

# 第 8 回 日本安全性薬理研究会 学術年会 プログラム

**＜1 日目＞ 2017 年 2 月 10 日（金曜日）**

**10:00～16:20 ポスター発表展示** ＜アネックス セイホクギャラリー＞

**9:50～10:00 開会挨拶** ＜弥生講堂 一条ホール＞

第 8 回学術年会会長 吉永 貴志（エーザイ株式会社）

**10:00～10:45 特別講演** ＜弥生講堂 一条ホール＞

座長：吉永 貴志（エーザイ株式会社）

**「TQT 試験の代替を意図した初期臨床試験における Intensive QT 評価戦略」**

安田 早苗（エーザイ株式会社 メディスン開発センター 日本臨床薬理室）

**10:45～12:15 ワークショップ** ＜弥生講堂 一条ホール＞

**「安全性薬理研究会分科会報告（J-ICET，iSmart）」**

座長：金納 明宏（株式会社薬物安全性試験センター），久保 多恵子（大日本住友製薬株式会社）

1．テレメトリー法による心血管系評価向上に関する日本の活動（J-ICET）_心電図チーム：早期臨床 QT 評価を見据えたサルにおける薬物誘発性の不整脈源性評価の提案

小松 竜一（中外製薬株式会社）

2．テレメトリー法による心血管系評価向上に関する日本の活動（J-ICET）_血圧/心拍チーム：生理的変動範囲を考慮した非げっ歯類の有望な血行動態評価基準の確立

香川 俊樹（田辺三菱製薬株式会社）

**3．iSmart：薬剤誘発性催不整脈リスク予測のための in silico 研究**

朝倉 圭一（日本新薬株式会社）

**12:30～13:30 ランチョンセミナー** ＜農学部 1 号館 8 番教室＞

**「質量分析を用いた新規な神経系の単一細胞レベルでの安全性評価技術」**

澤田 誠（名古屋大学 環境医学研究所 脳機能分野）

（コスモバイオ株式会社 主催）

**14:00～14:40 Flush talk（ポスター1 分間紹介）** ＜弥生講堂 一条ホール＞

（ポスター発表者のみなさまに，発表内容を 1 分間でご紹介いただきます）

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**15:30〜16:20　ポスター発表コアタイム（奇数 No.）**　＜アネックス　セイホクギャラリー＞

**16:40〜17:25　海外招待講演**　＜弥生講堂 一条ホール＞

座長：澤田 光平（エーザイ株式会社）

**「CNS Safety Pharmacology: Current Trends and Future Directions」**

Simon Authier（CiToxLAB）

**17:25〜17:55　海外招待講演**　＜弥生講堂 一条ホール＞

座長：安東 賢太郎（東邦大学　医学部 薬理学講座）

**「Safety Pharmacology: Reflecting on the Past and looking forward to the Challenges of the Future」**

Alan S. Bass（Safety Assessment and Laboratory Animal Resources, MRL, Merck & Co., Inc.）

**18:30〜　懇親会**　＜山上会館本館　1F＞

## ＜2日目＞　2016年2月11日（土曜日）

**8:00〜14:20　ポスター発表展示**　＜アネックス　セイホクギャラリー＞

**9:00〜11:00　シンポジウム1「中枢神経系」**　＜弥生講堂 一条ホール＞

**「臨床における中枢性副作用予測へのチャレンジ」**

座長：林 誠治（日本新薬株式会社），出口 芳樹（株式会社新日本科学）

1．**てんかん様神経活動の画像判別**

池谷 裕二（東京大学・薬学部・薬品作用学）

2．**臨床試験で認められた中枢神経毒性に関するリバース・トランスレーショナルリサーチの事例**

北山 哲也（協和発酵キリン株式会社　研究開発本部）

3．**CNS 創薬を支援する疾患モデルの開発**

橋本 均（大阪大学・薬学研究科・神経薬理学分野）

**11:50〜12:40　ポスター発表コアタイム（偶数 No.）**　＜アネックス　セイホクギャラリー＞

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**13:00～14:00　ランチョンセミナー**　＜農学部 1 号館 8 番教室＞

**「Adult human ex vivo cardiac models for preclinical safety assessment」**

Andre Ghetti （AnaBios Corporation）

（AnaBios Corporation 主催）

**14:20～16:05　シンポジウム２「循環器，他」**　＜弥生講堂 一条ホール＞

**「臨床における副作用回避へのチャレンジ」**

座長：尾崎 晴茂（武田薬品工業株式会社），千葉 克芳（第一三共株式会社）

1．**In vitro における心筋細胞収縮性評価の現状と可能性**

早川 智広（ソニー株式会社　iP&S セクター メディカル事業ユニット LS 事業部）

2．**統合的心血管リスク評価のためのフレームワーク：過去・現在・未来**

千葉 克芳（第一三共株式会社　研究開発本部　安全性研究所）

3．**システム薬理学に基づいた薬物副作用の統合的予測法**

鈴木 洋史（東京大学・医学部付属病院・薬剤部）

**16:05～17:00　安全性薬理 Q&A**　＜弥生講堂 一条ホール＞

ファシリテーター：

葛西 智恵子（アステラス製薬株式会社），横山 浩史（日本化薬株式会社）

**17:00～　閉会**　＜弥生講堂 一条ホール＞

JSPS 優秀発表賞表彰式　選考委員長　吉永 貴志（エーザイ株式会社）

閉会挨拶　9 回学術年会会長　安藤 博之（小野薬品株式会社）

以上

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**Poster sessions**

**1*. Evaluation of the autonomic nervous system under single- and group-housing with 'next generation' digital implantable telemetry in canine**

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

**2*. Cardiovascular effects of a novel compound M201-A in the *in vivo* canine models**

○Yuji NAKAMURA[1)], Kunio IWATA[2)], Koki CHIBA[3)], Nur Jaharat LUBNA[3)], Xin CAO[3)], Takeshi WADA[1)], Hiroko IZUMI-NAKASEKO[1)], Kentaro ANDO[1),3)], Atsuhiko T. NAITO[1),3)], Noboru KANEKO[2),4)], Atsushi SUGIYAMA[1),3)]
1) Department of Pharmacology, Faculty of Medicine, Toho University, 2) Aetase Pharma Co., Ltd., 3) Department of Pharmacology, Toho University Graduate School of Medicine, 4) Dokkyo Medical University

**3*. Electropharmacological effects of amitriptyline on the in situ canine hearts: Quantitative analysis of its potential for inducing acquired-type long QT syndrome and brugada syndrome**

○Nur Jaharat LUBNA[1)], Takeshi WADA[1)], Koki CHIBA[1)], Xin CAO[1)], Yuji NAKAMURA[1),2)], Hiroko IZUMI-NAKASEKO[1)], Kentaro ANDO[1)], Atsuhiko T. NAITO[1)], Yoshioki SATO[2)], Atsushi SUGIYAMA[1),2)]
1) Department of Pharmacology, Faculty of Medicine, Toho University, 2) Yamanashi Research Center of Clinical Pharmacology

**4. Effects of sotalol, terfenadine and verapamil on ECG parameters in anaesthetized Göttingen minipigs**

○Norio ODAGIRI, Kennosuke AKIYAMA, Yousuke OCHIAI, Kanta KAWABATA, Takashi HIRASHIMA, Hideomi UCHIDA, Yasuyuki OONISHI, Hideaki HIRATSUKA
Nonclinical Research Center, Drug Development Service Segment, LSI Medience Corporation

**5. Cardiovascular examination in socially housed dogs with advanced telemetry system**

○Kennosuke AKIYAMA, Kanta KAWABATA, Yoshinori YAMAMOTO, Hideomi UCHIDA, Yasuyuki OONISHI, Hideaki HIRATSUKA
Nonclinical Research Center, Drug Development Service Segment, LSI Medience Corporation

**6. Japan activity for improvement of cardiovascular evaluation by telemetry system (J-ICET)_BP/HR: Establishment of promising hemodynamic assessment criteria in non-rodents by considering the physiological variation range**

○Toshiki KAGAWA[1),3)], Ryouta HAYASHI[1),4)], Kengo SAKAMOTO[1),5)], Hiromi NEGISHI[1),6)], Hisashi NOGAWA[1),7)], Fuminori MATSUBARA[1),8)], Yoshiyuki MOTOKAWA[1),9)], Kenta WATANABE[1),10)], Yuko SEMI[1),11)], Toshio HASHIMOTO[2),3)], Jun HANDA[2),12)], Yukio TAKAHASHI[2),13)], Akihiro KANNO[1),8)], Harushige OZAKI[1),4)], Katsuyoshi CHIBA[1),14)]
1) Japanese Safety Pharmacology Society: J-ICET working group, 2) Japanese Society for Biopharmaceutical Statistics, 3) Mitsubishi Tanabe Pharma Corporation, 4) Takeda Pharmaceutical Co., Ltd., 5) Ina Research Inc., 6) LSI Medience Corporation, 7) Kyorin Pharmaceutical Co., Ltd., 8) Drug Safety Testing Center Co., Ltd., 9) Kissei Pharmaceutical Co., Ltd., 10) Sumitomo Dainippon Pharma Co., Ltd., 11) Ono Pharmaceutical Co., Ltd., 12) Nippon Kayaku Co., Ltd., 13) BioStat Institute Co., Ltd., 14) Daiichi Sankyo Co., Ltd.

**7. Cardiovascular parameters in socially housed cynomolgus monkeys**

○Tsuyoshi UCHINO, Takanobu MOCHIDOME, Hikaru FUKUDA, Motoki HIJIOKA, Tatsuya JIKUZONO, Yoshiki DEGUCHI
Drug Safety Research Laboratories, Shin Nippon Biomedical Laboratories, Ltd.

**8. Japan activity for improvement of cardiovascular evaluation by telemetry system (J-ICET)_ECG: Inter-facility variability assessment of moxifloxacin-induced QT prolongation in telemetered monkey study**

○ Hiroshi MIZUNO[1),3)], Ryuichi KOMATSU[1),4)], Tomomichi ISHIZAKA[1),5)], Akihito ITO[1),6)], Tatsuya JIKUZONO[1),7)], Tadashi KAKOI[1),8)], Yukio TAKAHASHI[2),9)], Jun HANDA[2),10)], Masahiro BANDO[2),3)], Tadashi KOGA[2),7)], Akihiro KANNO[1),11)], Harushige OZAKI[1),12)], Katsuyoshi CHIBA[1),5)]
1) Japanese Safety Pharmacology Society: J-ICET working group, 2) Japanese Society for Biopharmaceutical Statistics (JSBS), 3) Eisai Co., Ltd., 4) Chugai Pharmaceutical Co., Ltd., 5) Daiichi Sankyo Co., Ltd., 6) NISSEI BILIS Co., Ltd., 7) Shin Nippon Biomedical Laboratories, Ltd., 8) CMIC Pharma Science Co., Ltd., 9) BioStat Institute Co., Ltd., 10) Nippon Kayaku Co., Ltd., 11) Drug Safety Testing Center Co., Ltd., 12) Takeda Pharmaceutical Co., Ltd.

**9. Study on the effects of animals with arrhythmia in the cardiovascular test of safety pharmacology studier**

○Yasuo NAKAMURA, Masakazu IMAIZUMI, Kazuaki SASAKI, Tsuyoshi HIGUCH, Katsuhide NISHI
Pharmacology Department, Nonclinical Research Center, Drug Development Service Segment, LSI Medience Corporation

**10. Japan activity for improvement of cardiovascular evaluation by telemetry system (J-ICET)_ECG: Proposal of the advanced approach for drug-induced arrhythmogenicity in monkeys toward the early clinical QT assessment**

○ Ryuichi KOMATSU[1),3)], Hiroshi MIZUNO[1),4)], Tomomichi ISHIZAKA[1),5)], Akihito ITO[1),6)], Tatsuya JIKUZONO[1),7)], Tadashi KAKOI[1),8)], Yukio TAKAHASHI[2),9)], Jun HANDA[2),10)], Masahiro BANDO[2),4)], Tadashi KOGA[2),7)], Akihiro KANNO[1),11)], Harushige OZAKI[1),12)], Katsuyoshi CHIBA[1),5)]
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**11. Two type new frequency analyses of R-R interval variability after surgery in cynomolgus monkeys**

○Takuto YOKOTA, Tadashi KAKOI, Kiyotaka HOSHIAI, Yasuki AKIE
CMIC Pharma Science Co., Ltd.

**12. Evaluation of behavioral quantitative analysis of cynomolgus monkey in next generation telemetry transmitter with three axis acceleration sensor**

○Katsuhiko SAKAI[1)], Yoshiharu TSURU[1)], Takashi HIRASHIMA[2)]
1) Application Support Dept., Primetech Co., Ltd., 2) LSI Medience Co., Ltd.

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**13*. Chronic effects of anticancer drugs on contractile behaviors of human-induced pluripotent stem cell-derived cardiomyocyte monolayers evaluated noninvasively with an image-based analysis**

○Kohei SAKATOKU[1)], Masami KODAMA[2)], Yasuanri KANDA[3)], Yasuhiro YAMAZAKI[1)], Yuko SEKINO[3)], 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

**14*. Functional evaluation of cardiac types of cardiomyocytes using cell motion imaging**

○ Yui SUZUKI[1)], Kentaro TAKAHASHI[2)], Masami KODAMA[2)], Yasuanri KANDA[2),3)], Masahiko YAMAGUCHI[1)], Tomohiro HAYAKAWA[4)], Eriko MATSUI[4)], 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, 4) Sony Corporation

**15*. Characterization of drug responses in MiraCell™ cardiomyocytes, a new product of iPS cell-derived cardiomyocytes**

○ Toshikazu NISHIE[1)], Yasuhiro TOSAKA[1)], Toshiyuki MIURA[1)], Asako HATSUYAMA[1)], Hiroyuki FUKUSHIMA[2)], Masahide KAWATO[2)], Tatsuji ENOKI[1)], Jyun K YAMASHITA[2)], Jyunichi 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

**16*. Electrophysiological and pharmacological characterization of human iPS cell-derived cardiomyocytes for assessing drug-induced proarrhythmic potential**

○Wataru YAMAMOTO[1),2)], Keiichi ASAKURA[1),3)], Hiroyuki ANDO[1),4)], Tomohiko TANIGUCHI[1),5)], Atsuko OJIMA[1),5)], Takaaki UDA[1),4)], Tomoharu OSADA[1),6)], Seiji HAYASHI[1),3)], Chieko KASAI[1),7)], Norimasa MIYAMOTO[1),5)], Hiroyuki TASHIBU[1),8)], Takashi YOSHINAGA[1),5)], Daiju YAMAZAKI[1),9)], Atsushi SUGIYAMA[1),10)], Yasunari KANDA[1),9)], Kohei SAWADA[1),5)], Yuko SEKINO[1),9)]
1) Japan iPS Cardiac Safety Assessment (JiCSA), 2) Teijin Pharma Limited, 3) Nippon Shinyaku Co., Ltd., 4) Ono Pharmaceutical Co., Ltd., 5) Eisai Co., Ltd., 6) LSI Medience Corporation
7) Astellas Pharma Inc., 8) Ina Research Inc., 9) National Institute of Health Sciences (NIHS), 10) Department of Pharmacology, Faculty of Medicine, Toho University

**17*. *In vitro* pain responses in human iPSC-derived sensory neurons using MEA system**

○Aoi ODAWARA[1),2)], Takuya IIDA[2)], Naoki MATSUDA[2)], Ikuro SUZUKI[2)]
1) Research Institute of Electrical Communication, Tohoku University, 2) Graduate school of engineering, Tohoku Institute of Technology, 3) Japan Society for the Promotion of Science

**18*. Pharmacological responses in cultured human induced pluripotent stem cell-derived central neuronal cells using MEA system**

○Ikuro SUZUKI[1)], Aoi ODAWARA[1),2)], Takeshi KIKUCHI[1)], Naoki MATSUDA[1)]
1) Graduate school of engineering, Tohoku Institute of Technology, 2) Research Institute of Electrical Communication, Tohoku University

**19*. LPS-induced hypoxia exacerbates susceptibility to drug-induced mitochondrial toxicity**

○Yugo IKEYAMA, Kouichi ARAKAWA, Shuichi SEKINE, Kousei ITO
Laboratory of Biopharmaceutics, Faculty of Pharmaceutical Sciences, Chiba University

**20. Classification of drug-induced torsadogenic risk using human iPS cell-derived cardiomyocytes**

○Hiroyuki ANDO[1),2)], Takashi YOSHINAGA[1),3)], Wataru YAMAMOTO[1),4)], Keiichi ASAKURA[1),5)], Takaaki UDA[1),2)], Tomohiko TANIGUCHI[1),3)], Atsuko OJIMA[1),3)], Raku SHINKYO[1),3)], Kiyomi KIKUCHI[1),3)], Tomoharu OSADA[1),6)], Seiji HAYASHI[1),5)], Chieko KASAI[1),7)], Norimasa MIYAMOTO[1),3)], Hiroyuki TASHIBU[1),8)] Daiju YAMAZAKI[1),9)], Atsushi SUGIYAMA[1),10)], Yasunari KANDA[1),9)], Kohei SAWADA[1),3)], Yuko SEKINO[1),9)]
1) Japan iPS Cardiac Safety Assessment (JiCSA), 2) Ono Pharmaceutical Co., Ltd., 3) Eisai Co., Ltd., 4) Teijin Pharma Limited, 5) Nippon Shinyaku Co., Ltd., 6) LSI Medience Corporation, 7) Astellas Pharma Inc., 8) Ina Research Inc., 9) National Institute of Health Sciences (NIHS), 10) Department of Pharmacology, Faculty of Medicine, Toho University

**21. Trial for drug-induced epileptogenic phenotype classification in primary rodent neurons and human induced pluripotent stem cell-derived neurons using burst pattern and burst onset time cross-correlogram analysis of MEA data**

○Norimasa MIYAMOTO[1),2),3)], Keiichi SHIRAKAWA[4)], Kohei SAWADA[1)]
1) Biopharmaceutical Assessment Core Function Unit, Medicine Development Center, Eisai Co., Ltd., 2) Consortium for Safety Assessment using Human iPS Cells (CSAHi), 3) iPS Non-clinical Experiments for Nervous System (iNCENS), 4) Alpha MED Scientific Inc.

**22. SCAD-*MT*™ cardiomyocyte: human pluripotent stem cell-derived cardiomyocyte micro-tissues that show maturation and functional stability promoted by using aligned nanofibers**

○Kazuhiro AIBA[1)], Liu LI[1),2)], Amy E. TAYLOR[3)], Margaret A. CRAIG[1)], Kensuke KATO[1)], Godfrey L. SMITH[3),4)], Norio NAKATSUJI[1),2)]
1) Stem Cell & Device Laboratory, Inc. (SCAD), Kyoto, Japan, 2) WPI-iCeMS, Kyoto University, Kyoto, Japan, 3) Clyde Biosciences Ltd., Glasgow, Scotland, UK, 4) Institute of Cardiovascular and Medical Sciences, University of Glasgow, Glasgow, Scotland, UK

**23. High throughput application of temperature control and current clamp recording on automated patch clamp system**

○Yuka SHIBANO, Kazuya TSURUDOME, Yuji TSURUBUCHI
1) Sophion Bioscience K.K.

**24. Evaluation of the drug's property of the blocking to potassium and calcium channel from the change of FPD prolongation using human iPS cell-derived cardiomyocytes**

○Kimihito YOSHIKAWA, Fumihide BUNAI, Tetsuo KITAMURA, Mayumi OBO, Tomoharu OSADA, Hiroaki INOUE, Hideomi UCHIDA, Yasuyuki OONISHI, Hideaki HIRATSUKA
Nonclinical Research Center, Drug Development Service Segment, LSI Medience Corp.

**25. Biochemical hERG channel trafficking assay using HEK/CHO cells**

○Hiroshi MATSUKAWA, Satomi TOMIZAWA, Mao YAMAGUCHI, Hironori OHSHIRO, Taku IZUMI, Yoshimi KATAYAMA, Akihiro KANNO
Higashimatsuyama Laboratories, Drug Safety Testing Center, Co., Ltd.

**26. The usefulness of FDSS/μCell $Ca^{2+}$ imaging platform using human iPSC-derived cardiomyocyte for *in vitro* cardiotoxicity screening**

○Hideaki MITSUI, Mahoko ASAYAMA, Atsushi TORATANI, Yuhei OZAWA, Naoki TSUDA, Kozo MORIMURA, Toshinobu SHIMIZU
Sohyaku. Innovative Research Division, Mitsubishi Tanabe Pharma Corporation

**27. The difference response of human cryopreserved hepatocyte to mitochondrial toxic compounds from HepG2**

○Ryo FUJINO, Kenta HASHIZUME, Shinsuke AOYAMA, Shin-ichi NINOMIYA
Drug Development Solutions Division, Sekisui Medical Co., Ltd.

**28. Introduction to activities by iSmart group F – *In-vitro* wet assay**

○Yoshimi KATAYAMA[1),2)], Takehito ISOBE[1),3)], Tomokazu KANEHISA[1),4)], Ayane SAKAGUCHI[1),5)]
1) iSmart, Japanese Safety Pharmacology Society, 2) Higashimatsuyama Laboratories, Drug Safety Testing Center, Co., Ltd., 3) Research Division, Chugai Pharmaceutical Co., Ltd., 4) Central Pharmaceutical Research Institute, Japan Tobacco Inc., 5) Developmental Research Laboratories, Shionogi & Co., LTD.

**29. The effect of state and rate dependent IKr channel inhibition on the action potential in human** cardiomyocyte: a simulation study by comparison of the original and IKr Markov state model incorporated O'HaraRudy models

○Yasuyuki ABE[1),2)], Yoshiyuki FURUKAWA[1),3)], Yuki OHYABU[1),4)], Hiroyuki ANDO[1),5)]
1) iSmart, Japanese Safety Pharmacology Society, 2) Asubio Pharma Co., Ltd., 3) Takeda Pharmaceutical Company Limited, 4) Kaken Pharmaceutical Co., Ltd., 5) Ono Pharmaceutical Co., Ltd.

**30. Reconstruction of temperature-dependent computational model for human Nav1.5 channel**

○Keiichi ASAKURA[1),2)], Yoshimi KATAYAMA[1),3)]
1) iSmart, Japanese Safety Pharmacology Society, 2) Pharmacokinetics and Safety Assessment Dept., R&D Lab, Nippon Shinyaku Co., Ltd., 3) Higashimatsuyama Laboratories, Drug Safety Testing Center, Co., Ltd.

**31. iSMART: *In silico* prediction of Torsadogenic drug-induced proarrhythmias from action potential waveforms in O'Hara-Rudy human cardiac ventricular model**

○Tetsuji ITOH[1)], Chiaki NAKAMORI[2)], Shota SAIKI[1)], Yuichi UTSUMI[3)] Shigeyuki FUJIMOTO[4)], Shohei KANIE[4)], Masao OGUCHI[5)], Shota NAKAGAWA[6)]
1) Developmental Research Laboratories, Shionogi & Co., LTD., 2) Drug Safety and Pharmacokinetics Laboratories, Taisho Pharmaceutical Co., Ltd., 3) Otsuka Pharmaceutical Factory, Inc., 4) Toxicology Laboratory, TAIHO Pharmaceutical Co., Ltd., 5) Research Administration Department, Ina Research Inc., 6) R&D Safety Science Research, Kao Corporation

**32. Quantitative systems pharmacology approach for risk assessment on drug-induced proarrhythmic effects: astemizole case study**

○Mikiko NAKAMURA[1),2)], Fumiya YONEYAMA[1),3)], Akira HIRATA[1),4)], Kazuyuki FUJISHIMA[1),5)]
1) iSmart, Japanese Safety Pharmacology Society, 2) Translational Clinical Research Science & Strategy Dept., Chugai Pharmaceutical Co., Ltd., 3) Drug Research Section III, Fukushima Research Lab., R&D Dept., Toa Eiyo, Ltd., 4) Toxicology Lab., Pharmaceutical Research Center, Meiji Seika Pharma Co., Ltd., 5) Pharmacology Research Lab., Pharmaceutical Research Center, Meiji Seika Pharma Co., Ltd.

**33. Pharmacological characterization of *in silico* HuVEC (Asakura) model: a comparison with O'Hara-Rudy model <Progress report>**

○Masakazu ISHIMURA[1),7)], Fumiya YONEYAMA[2),7)], Yukiko MURAKI[3),7)], Hiroko IZUMI-NAKASEKO[4),7)], Saki MAEKAWA[5),7)], Keiichi ASAKURA[6),7)]
1) Kaken Pharmaceutical Co., Ltd., 2) Toa Eiyo Ltd., 3) Kyorin Pharmaceutical Co., Ltd., 4) Toho University, 5) Ritsumeikan University, 6) Nippon Shinyaku Co., Ltd., 7) iSmart, Japanese Safety Pharmacology Society

**34. Usefulness of integrated *in silico* human transmural ventricular wedge preparation models for safety evaluation of drug candidates**

○Taeko KUBO[1),2),3)], Takashi ASHIHARA[2)], Tadashi TSUBOUCHI[1)], Kiyoko BANDO[1)], Minoru HORIE[2)]
1) Preclinical Research Laboratories, Sumitomo Dainippon Pharma Co., Ltd., 2) Department of Cardiovascular Medicine, Heart Rhythm Center, Shiga University of Medical Science, 3) iSmart, Japanese Safety Pharmacology Society

Note: Posters given odd and even numbers are displayed on Friday, February 10th and on Saturday, February 11th, respectively. Posters participated in the award for excellence of research presentation are indicated by an asterisk (*) and displayed each day. Poster No. 34 is exceptionally displayed on Friday, February 10th.