

# シンポジウム Symposia

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Sunday, 26 March 10:40 ~ 11:45 / 13:15 ~ 17:40

Plenary Lecture: Room B Tachibana Conference Hall, Sendai International Center (Conference building 2F)

Invited Poster Presentation: Room G Meeting Room 4, Sendai International Center (Conference building 2F)

## 第3回国際創薬シンポジウム ISMS

### 3rd International Symposium for Medicinal Sciences

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10:40 ~ 10:45

#### Opening Remark

Chairman: Akira OTAKA (Tokushima University)

10:45 ~ 11:45

#### Plenary Lecture 1

Chairman: Tsuneaki SAKATA (Shionogi & Co., Ltd.)

##### ISMS-PL01 Robot Scientists: Automating Drug Design

Ross D. KING (University of Manchester)

13:15 ~ 14:15

#### Plenary Lecture 2

Chairman: Tatsuhiko KODAMA (The University of Tokyo)

##### ISMS-PL02 Recent Advances in cryo-EM: Applications to Drug Discovery

Sriram SUBRAMANIAM (National Cancer Institute, NIH)

14:20 ~ 17:40

#### Invited Poster Presentation

14:20 ~ 16:00 Short Presentation for Invited Poster Presentation

16:00 ~ 17:40 Poster Presentation

Discussion Odd Number: 16:00 ~ 16:50

Even Number: 16:50 ~ 17:40

##### 26G-ISMS01 Unstructured Protein : A New Approach for Drug Discovery

○ Takenao ODAGAMI<sup>1</sup>, Yoichiro HIROSE<sup>1</sup>, Yoshimasa IMAMURA<sup>1</sup>, Akira KATOH<sup>1</sup>,  
Tadashi MISHINA<sup>1</sup>, Hiroyuki KOUJI<sup>1</sup> (<sup>1</sup>Research & Development, PRISM BioLab Co., Ltd.)

##### 26G-ISMS02 Development of Macrocyclic Peptide Targeting Ebola Glycoprotein

○ Shiori UMEMOTO<sup>1</sup>, Junki MARUYAMA<sup>2</sup>, Ayato TAKADA<sup>2</sup>, Hiroaki SUGA<sup>1</sup> (<sup>1</sup>Department  
of Chemistry, Graduate School of Science, The University of Tokyo, <sup>2</sup>Department of Global Epidemiology, Research  
Center for Zoonosis Control, Hokkaido University)

##### 26G-ISMS03 Combinatorial Solid-Phase Synthesis and Biological Evaluation of Cyclodepsipeptide Destruxin B as a Negative Regulator for Osteoclast Morphology

○ Hiroshi SATO<sup>1,2</sup>, Masahito YOSHIDA<sup>1</sup>, Hayato MURASE<sup>3</sup>, Hiroshi NAKAGAWA<sup>3</sup>,  
Takayuki DOI<sup>1</sup> (<sup>1</sup>Graduate School of Pharmaceutical Sciences, Tohoku University, <sup>2</sup>Mitsubishi Tanabe Pharma  
Corporation, <sup>3</sup>Department of Applied Biological Chemistry, Chubu University)

##### 26G-ISMS04 SAR Exploration of Selective Kinase Inhibitors based on the “Head-to-Tail” Approach: Discovery of PI4KIII $\alpha$ Inhibitors Bearing Diverse Scaffolds

○ Satoru NOJI<sup>1</sup>, Noriyoshi SEKI<sup>1</sup>, Takaki MAEBA<sup>1</sup>, Takayuki SAKAI<sup>1</sup>, Eiichi WATANABE<sup>1</sup>,  
Katsuya MAEDA<sup>1</sup>, Kyoko FUKUSHIMA<sup>1</sup>, Toru NOGUCHI<sup>1</sup>, Kazuya OGAWA<sup>1</sup>,  
Yukiyo TOYONAGA<sup>1</sup>, Tamotsu NEGORO<sup>1</sup>, Hisashi KAWASAKI<sup>1</sup>, Makoto SHIOZAKI<sup>1</sup>  
(<sup>1</sup>Central Pharmaceutical Research Institute, Japan Tobacco Inc.)

- 26G-ISMS05 Search for Anti-leukemic Drugs Targeting the Transcription Factor Runx1 by INTENDD**  
 ○ Masaaki SHIINA<sup>1</sup>, Shiho BABA<sup>1</sup>, Akiko UCHIYAMA<sup>1</sup>, Chikako OKADA<sup>1</sup>, Takeshi TANAKA<sup>2</sup>, Ken IKEDA<sup>2</sup>, Shigetsugu KAWAKITA<sup>2</sup>, Takao MATSUZAKI<sup>2</sup>, Hirotsugu KOMATSU<sup>2</sup>, Masato HOSODA<sup>2</sup>, Kazuhiro OGATA<sup>1</sup> (<sup>1</sup>Yokohama City University, Graduate School of Medicine, <sup>2</sup>Interprotein Corporation)
- 26G-ISMS06 Evaluation of Novel Anti-Dengue Candidates Using *In Silico* and *In Vitro* Approaches**  
 ○ Yu-Shi TIAN<sup>1</sup>, Hitoshi MATSUDA<sup>2</sup>, Xinzhe LIU<sup>2</sup>, Norihito KAWASHITA<sup>2,3</sup>, Tatsuya TAKAGI<sup>2,3</sup> (<sup>1</sup>Graduate School of Information Science and Technology, Osaka University, <sup>2</sup>Graduate School of Pharmaceutical Sciences, Osaka University, <sup>3</sup> Graduate School of Information Science and Technology, Osaka University Research Institute for Microbial Diseases)
- 26G-ISMS07 Development and Construction of an Original Compound Library for CNS Drug Discovery: Combining Computational and Wet Data to Enhance CNS Drug-likeness**  
 ○ Daiju HASEGAWA<sup>1</sup> (<sup>1</sup>Medicinal Chemistry, Neurology Tsukuba Research Department, Discovery, Medicine Creation, Neurology Business Group, Eisai Co., Ltd.)
- 26G-ISMS08 Structure-based Design, Synthesis, and Biological Evaluation of Imidazo[1,2-*b*] Pyridazine- based p38 MAP Kinase Inhibitors**  
 ○ Akira KAIEDA<sup>1</sup>, Masashi TAKAHASHI<sup>1</sup>, Takafumi TAKAI<sup>1</sup>, Masayuki GOTO<sup>1</sup>, Takahiro MIYAZAKI<sup>1</sup>, Yuri HORI<sup>1</sup>, Satoko UNNO<sup>1</sup>, Tomohiro KAWAMOTO<sup>1</sup>, Toshimasa TANAKA<sup>1</sup>, Sachiko ITONO<sup>1</sup>, Terufumi TAKAGI<sup>1</sup>, Teruki HAMADA<sup>1</sup>, Mikio SHIRASAKI<sup>1</sup>, Kengo OKADA<sup>1</sup>, Gyorgy SNEEL<sup>2</sup>, Ken BRAGSTAD<sup>2</sup>, Bi-Ching SANG<sup>2</sup>, Osamu UCHIKAWA<sup>1</sup>, Seiji MIWATASHI<sup>1</sup> (<sup>1</sup>Takeda Pharmaceutical Company Limited, <sup>2</sup>Takeda California, Inc.)
- 26G-ISMS09 Flow Chemistry: New Horizons in Chemical Space for the Creation of Next Generation Libraries**  
 Daniel BLANCO-ANIA<sup>3</sup>, Sagar Ashok GAWADE<sup>1</sup>, Luuk MAARTENSE<sup>1</sup>, Roel VERLEIJSDONK<sup>1</sup>, Remco MERKX<sup>2</sup>, Huib OVAA<sup>2</sup>, Floris RUTJES<sup>1</sup>, Marjon BOLSTER<sup>3</sup>, Luc ZWINKELS<sup>3</sup>, Joeri SCHEIDT<sup>3</sup>, Pauline van MEURS<sup>3</sup>, Jorg BENNINGSHOF<sup>3</sup>,  
 ○ Norimasa MORITA<sup>3</sup> (<sup>1</sup>Radboud University, <sup>2</sup>Leiden UMC (Former NKI), <sup>3</sup>Mercachem)
- 26G-ISMS10 Transition Metal-Free, Tryptophan-Selective Bioconjugation of Proteins**  
 ○ Kounosuke OISAKI<sup>1</sup>, Yohei SEKI<sup>1</sup>, Takashi ISHIYAMA<sup>1</sup>, Daisuke SASAKI<sup>1,2</sup>, Junpei ABE<sup>1</sup>, Yohei SOHMA<sup>1,2</sup>, Motomu KANAI<sup>1,2</sup> (<sup>1</sup>Graduate School of Pharmaceutical Sciences, The University of Tokyo, <sup>2</sup>JST, ERATO Kanai Life Science Catalysis Project)
- 26G-ISMS11 Total Synthesis of Halichondrin A and C**  
 ○ Akihiko YAMAMOTO<sup>1</sup>, Atsushi UEDA<sup>1</sup>, Paul BRÉMOND<sup>1</sup>, Paolo S. TISENI<sup>1</sup>, Daisuke KATO<sup>1</sup>, Yoshito KISHI<sup>1</sup> (<sup>1</sup>Department of Chemistry and Chemical Biology, Harvard University)
- 26G-ISMS12 Parallel Fluorescent Probe Synthesis Based on the Large-scale Preparation of BODIPY FL Propionic Acid**  
 ○ Taisuke KATOH<sup>1</sup>, Masato YOSHIKAWA<sup>1</sup>, Takeshi YAMAMOTO<sup>1</sup>, Ryosuke ARAI<sup>1</sup>, Noriyuki NII<sup>1</sup>, Yoshihide TOMATA<sup>1</sup>, Shinkichi SUZUKI<sup>1</sup>, Ryoukichi KOYAMA<sup>1</sup>, Nobuyuki NEGORO<sup>1</sup>, Takatoshi YOGO<sup>1</sup> (<sup>1</sup>Pharmaceutical Research Division, Takeda Pharmaceutical Company, Ltd)
- 26G-ISMS13 Improvement in Pharmacokinetics and *In Vivo* Activity of Somatostatin by Chemical Glycosylation**  
 ○ Hirofumi OCHIAI<sup>1</sup>, Jun IGARASHI<sup>1</sup>, Hayato SAIJO<sup>1</sup>, Takahiro YAMAMOTO<sup>1</sup>, Yuji NISHIUCHI<sup>1</sup>, Akio KANATAN<sup>1</sup>, Taiji SHIMODA<sup>1</sup> (<sup>1</sup>GlyTech, Inc.)
- 26G-ISMS14 Development of an Oxidative Mizoroki-Heck Reaction for Late-stage C-H Functionalization of Complex Molecules and Application to Pharmaceutical Studies**  
 ○ Kenji WATANABE<sup>1</sup>, Amrita DAS<sup>1</sup>, Takumi KIMIJIMA<sup>1</sup>, Tomohiro YAMASHITA<sup>1</sup>, Kazuhide INOUE<sup>1</sup>, Makoto TSUDA<sup>1</sup>, Takashi OHSHIMA<sup>1</sup> (<sup>1</sup>Graduate School of Pharmaceutical Sciences, Kyushu University)

- 26G-ISMS15 Functional Characterization of Acetylcholine Receptors in Human Hippocampus-Derived Neurons**  
 ○ Kazuyuki FUKUSHIMA<sup>1</sup>, Kazuto YAMAZAKI<sup>2</sup>, Norimasa MIYAMOTO<sup>3</sup>, Kohei SAWADA<sup>3</sup> (<sup>1</sup>Neurology Tsukuba Research Department, Discovery, Medicine Creation, Neurology Business Group, Eisai Co., Ltd., <sup>2</sup>Technology Cross Point Laboratory, hhc Data Creation Center, Eisai Co., Ltd., <sup>3</sup>Global CV Assessment, BA CFU, Medicine Development Center, Eisai Co., Ltd.)
- 26G-ISMS16 Analgesic Effect of Novel 11  $\beta$  -HSD1 Inhibitor ASP3662 and its Mechanism of Action in a Spinal Nerve Ligation Model of Neuropathic Pain**  
 ○ Tetsuo KISO<sup>1</sup>, Toshihiro SEKIZAWA<sup>1</sup>, Mina TSUKAMOTO<sup>1</sup>, Junko YARIMIZU<sup>1</sup>, Shuichiro KAKIMOTO<sup>1</sup> (<sup>1</sup>Drug Discovery Research, Astellas Pharma Inc.)
- 26G-ISMS17 Atomic-Scale Investigation on Acetaminophen Crystals with Stable and Metastable Phases by Frequency Modulation Atomic Force Microscopy in Aqueous Solution**  
 ○ Naritaka KOBAYASHI<sup>1</sup>, Kazuki OKANO<sup>2</sup>, Yoichiro MORI<sup>3</sup>, Shun FUKUKITA<sup>3</sup>, Mihoko MARUYAMA<sup>4</sup>, Hiroaki ADACHI<sup>3,5</sup>, Kazufumi TAKANO<sup>4,5</sup>, Satoshi MURAKAMI<sup>5,6</sup>, Hiroyoshi MATSUMURA<sup>5,7</sup>, Tsuyoshi INOUE<sup>3,5</sup>, Masashi YOSHIMURA<sup>5,8</sup>, Yusuke MORI<sup>3,5</sup>, Seiichiro NAKABAYASHI<sup>1</sup>, Hiroshi YOSHIKAWA<sup>1,3</sup> (<sup>1</sup>Graduate School of Science and Engineering, Saitama University, <sup>2</sup>Faculty of Science, Saitama University, <sup>3</sup>Graduate School of Engineering, Osaka University, <sup>4</sup>Graduate School of Life and Environmental Sciences, Kyoto Prefectural University, <sup>5</sup>SOSHO, Inc., <sup>6</sup>Graduate School of Bioscience and Biotechnology, Tokyo Institute of Technology, <sup>7</sup>College of Life Science, Ritsumeikan University, <sup>8</sup>Institute of Laser Engineering, Osaka University)
- 26G-ISMS18 Anti-inflammatory Flavan-dihydrochalcones with Unprecedented Carbon Skeletons from *Daemonorops Draco***  
 ○ Ping-Chung KUO<sup>1</sup>, Hsin-Yi HUNG<sup>1</sup>, Tsong-Long HWANG<sup>2</sup>, Tian-Shung WU<sup>1</sup> (<sup>1</sup>School of Pharmacy, National Cheng Kung University Hospital, College of Medicine, National Cheng Kung University, <sup>2</sup>Graduate Institute of Natural Products, College of Medicine, Chang Gung University)
- 26G-ISMS19 Development of a Fully Automated HPLC System (ASAPrep<sup>TM</sup>) Designed for Multiple Compound Purifications**  
 ○ Chie KUSHIBE<sup>1</sup>, Katsuhiko MIWA<sup>1</sup>, Hidetoshi TERADA<sup>2</sup>, Yuji KATSUYAMA<sup>2</sup> (<sup>1</sup>Medicinal Chemistry Research Laboratories, Pharmaceutical Research Division, Takeda Pharmaceutical Company Limited, <sup>2</sup>Life Science Business Department, Analytical & Measurement Instruments Division, Shimadzu Corporation)
- 26G-ISMS20 Discovery of a Novel PDE10A Inhibitor as Highly Effective for Schizophrenia**  
 ○ Yoichi KADOH<sup>1</sup>, Takehiko MATSUMURA<sup>1</sup>, Yoshihito TANAKA<sup>1</sup>, Mitsuya HONGU<sup>1</sup>, Haruko MIYOSHI<sup>1</sup>, Mayumi KIMURA<sup>1</sup>, Kei TAKEDOMI<sup>1</sup>, Kenji OMORI<sup>1</sup>, Jun KOTERA<sup>1</sup>, Takashi SASAKI<sup>1</sup>, Kiichi TANAKA<sup>1</sup>, Keiko MIWA<sup>1</sup>, Tamaki KOBAYASHI<sup>1</sup>, Hiroyuki TANIGUCHI<sup>1</sup>, Taketoshi ISHII<sup>1</sup>, Yumi WATANABE<sup>1</sup>, Haruna ITODA<sup>1</sup>, Rikiya OHASHI<sup>1</sup>, Kouki KOJIMA<sup>1</sup>, Masaya FUKUDA<sup>1</sup>, Saori SATO<sup>1</sup>, Itsuko NAKAMURA<sup>1</sup>, Toshiaki SAKAMOTO<sup>1</sup>, Toshiyuki HIMIYAMA<sup>1</sup>, Masataka HIKOTA<sup>1</sup>, Eiji KAWANISHI<sup>1</sup> (<sup>1</sup>Mitsubishi Tanabe Pharma Corporation)
- 26G-ISMS21 Nucleic Acid Drugs Large Scale Manufacturing and Specification Assay- Equivalency Solid Phase versus AJIPHASE® and Oligonucleotide Sequences Confirmation for IND and NDA**  
 ○ Satoshi INOUE<sup>1</sup>, Hirokazu NANKAI<sup>1</sup>, Emi SAITO<sup>1</sup>, Hideaki SATO<sup>1</sup>, Kazuhiko YUYAMA<sup>1</sup> (<sup>1</sup>GeneDesign, Inc.)
- 26G-ISMS22 Amycolamicin, a Novel Antibiotic as a Promising Candidate for *Clostridium Difficile* Infection: Antibacterial Activity, Mode of Action, and *In Vivo* Efficacy**  
 ○ Yoshimasa ISHIZAKI<sup>1</sup>, Kazushige SASAKI<sup>1</sup>, Hideki HASHIZUME<sup>1</sup>, Chigusa HAYASHI<sup>1</sup>, Kunio INOUE<sup>1</sup>, Hayamitsu ADACHI<sup>1</sup>, Yoshiaki TAKAHASHI<sup>1</sup>, Masayuki IGARASHI<sup>1</sup>, Yoshio NISHIMURA<sup>1</sup>, Yuzuru AKAMATSU<sup>1</sup>, Akio NOMOTO<sup>1</sup>, Masakatsu SHIBASAKI<sup>1</sup> (<sup>1</sup>Institute of Microbial Chemistry (BIKAKEN))
- 26G-ISMS23 Identification and Optimization of a Novel Series of Tetrahydroisoquinoline Derivatives as an Orally Active MGAT2 Inhibitor**  
 ○ Tsuyoshi BUSUJIMA<sup>1</sup>, Hiroaki TANAKA<sup>2</sup>, Eiji MUNETOMO<sup>3</sup>, Kiyokazu KITANO<sup>3</sup>, Masako SAITO<sup>3</sup> (<sup>1</sup>Pharmaceutical Science Laboratories, <sup>2</sup>Chemistry Laboratories, <sup>3</sup>Pharmacology Laboratories, Taisho Pharmaceutical Co., Ltd.)

- 26G-ISMS24** Discovery of Novel Fluoroquinolone Antibiotics WFQ-101 and Its Optimization Study  
 ○ Tatsuya HIRANO<sup>1</sup>, Tomohiko KINOSHITA<sup>1</sup>, Daichi KAZAMORI<sup>1</sup>, Satoshi INOUE<sup>1</sup>, Kouji NISHIMURA<sup>1</sup>, Asuka SAKURAI<sup>1</sup>, Ayuka SASAKI<sup>1</sup>, Yasuhiro KURAMOTO<sup>1</sup>, Hiroataka AMANO<sup>1</sup>, Akira YAZAKI<sup>1</sup> (<sup>1</sup>Drug Discovery Laboratory, Wakunaga Pharmaceutical Co., Ltd.)
- 26G-ISMS25** Anti-CTLA-4 Antibody scFv Producing Recombinant *Bifidobacterium* Secretes CTLA-4 Blocker Specifically Inside Hypoxic Tumor and Suppresses Tumor Growth in Syngeneic Mice Model  
 ○ Shiro KATAOKA<sup>1</sup>, Koichiro SHIOYA<sup>1</sup>, Li WANG<sup>1</sup>, Tomio MATSUMURA<sup>1</sup>, Hitomi SHIMIZU<sup>1</sup>, Yasuyoshi KANARI<sup>1</sup>, Yuji SEKI<sup>1</sup>, Yuko SHIMATANI<sup>1</sup>, Minoru FUJIMORI<sup>2</sup>, Shun'ichiro TANIGUCHI<sup>3</sup> (<sup>1</sup>Anaeropharma Science, Inc., 19-8, Nihonbashi Kabutocho, Chuo-ku, Tokyo 103-0026, Japan, <sup>2</sup>Department of Breast Surgery, Tokyo Medical University Ibaraki Medical Center, Ibaraki, Japan, <sup>3</sup>Department of Comprehensive Cancer Therapy, Shinshu University School of Medicine)
- 26G-ISMS26** Structural Basis for Activation of *Neisseria Meningitidis* Elongation Factor P with Arginine-32 Rhamnosylation by EarP  
 ○ Toru SENGOKU<sup>1</sup> (<sup>1</sup>RIKEN Structural Biology Laboratory)
- 26G-ISMS27** Design, Synthesis and Biological Evaluation of a Novel Series of Peripheral-selective Noradrenaline Reuptake Inhibitor, Part I -Lead Series Discovery and Biological Concept Validation-  
 ○ Ikuo FUJIMORI<sup>1</sup>, Tomoya YUKAWA<sup>1</sup>, Taku KAMEI<sup>1</sup>, Yoshihisa NAKADA<sup>1</sup>, Nobuki SAKAUCHI<sup>1</sup>, Masami YAMADA<sup>1</sup>, Yusuke OHBA<sup>1</sup>, Maiko TAKIGUCHI<sup>1</sup>, Masako KUNO<sup>1</sup>, Izumi KAMO<sup>1</sup>, Hideyuki NAKAGAWA<sup>1</sup>, Teruki HAMADA<sup>1</sup>, Tomoko IGARI<sup>1</sup>, Teruaki OKUDA<sup>1</sup>, Satoshi YAMAMOTO<sup>1</sup>, Tetsuya TSUKAMOTO<sup>1</sup>, Yuji ISHICHI<sup>1</sup>, Hiroyuki UENO<sup>1</sup> (<sup>1</sup>Takeda Pharmaceutical Company Limited)
- 26G-ISMS28** Design, Synthesis and Biological Evaluation of a Novel Series of Peripheral-selective Noradrenaline Reuptake Inhibitor, Part II -Lead Optimization with Avoiding P-gp Substrate and Genetic Polymorphism-  
 ○ Tomoya YUKAWA<sup>1</sup>, Ikuo FUJIMORI<sup>1</sup>, Taku KAMEI<sup>1</sup>, Yoshihisa NAKADA<sup>1</sup>, Nobuki SAKAUCHI<sup>1</sup>, Masami YAMADA<sup>1</sup>, Yusuke OHBA<sup>1</sup>, Hiroyuki UENO<sup>1</sup>, Maiko TAKIGUCHI<sup>1</sup>, Masako KUNO<sup>1</sup>, Izumi KAMO<sup>1</sup>, Hideyuki NAKAGAWA<sup>1</sup>, Yasushi FUJIOKA<sup>1</sup>, Tomoko IGARI<sup>1</sup>, Yuji ISHICHI<sup>1</sup>, Tetsuya TSUKAMOTO<sup>1</sup> (<sup>1</sup>Takeda Pharmaceutical Company Limited)
- 26G-ISMS29** *Ex Vivo* Gene-manipulated Mature Adipocytes: Novel Gene Therapy Medicine for Sustained Protein Replacement Therapy of Variety of Intractable Diseases  
 ○ Masayuki KURODA<sup>1</sup>, Hideaki BUJO<sup>2</sup>, Koutaro YOKOTE<sup>3</sup>, Yasushi SAITO<sup>4</sup>, Masayuki ASO<sup>5</sup> (<sup>1</sup>Center for Advanced Medicine, Chiba University, <sup>2</sup>Department of Clinical Laboratory Medicine, Toho University Medical Center Sakura Hospital, <sup>3</sup>Department of Clinical Cell Biology and Medicine, Graduate School of Medicine, Chiba University, <sup>4</sup>Superintendent of the hospital bureau, City Hall of Chiba, <sup>5</sup>CellGenTech, Inc.)
- 26G-ISMS30** Application of Novel Highly Immunodeficient Mice for Patient Derived Xenograft (PDX) Model and Evaluation of Anticancer Therapy  
 ○ Seiji OKADA<sup>1</sup>, Kulthida VAETEEWOOTTACAHN<sup>1</sup>, Hiroki GOTO<sup>1</sup>, Ryusho KARIYA<sup>1</sup> (<sup>1</sup>Center for AIDS Research and Graduate School of Medical Sciences, Kumamoto University)
- 26G-ISMS31** The Unbound Concentration of Multimodal Drugs in the Assay Medium Used in the Multi-electrode Array System for Cardiac Risk Assessment with iPS Cell-derived Cardiomyocytes  
 ○ Takashi YOSHINAGA<sup>1,4</sup>, Raku SINKYO<sup>2</sup>, Kiyomi KIKUCHI<sup>2</sup>, Tomohiko TANIGUCHI<sup>1,4</sup>, Yuko SEKINO<sup>3,4</sup>, Kohei SAWADA<sup>1,4</sup> (<sup>1</sup>Global CV Assessment, Eisai Co., Ltd., <sup>2</sup>Global DMPK, Eisai Co., Ltd., <sup>3</sup>Division of Pharmacology, National Institute of Health Sciences, <sup>4</sup>Japan iPS Cardiac Safety Assessment (JiCSA))

- 26G-ISMS32** Discovery of ASP3026, a Potent and Selective Anaplastic Lymphoma Kinase (ALK) Inhibitor  
 ○ Kazuhiko IKUBO<sup>1</sup>, Yutaka KONDOH<sup>1</sup>, Itsuro SHIMADA<sup>1</sup>, Takahiro MATSUYA<sup>1</sup>, Kenichi MORI<sup>1</sup>, Yoko UENO<sup>1</sup>, Sadao KUROMITSU<sup>1</sup>, Minoru OKADA<sup>1</sup> (<sup>1</sup>Astellas Pharma Inc.)
- 26G-ISMS33** Immune Profiling with a New NGS-based Repertoire Analysis  
 ○ Takaji MATSUTANI<sup>1</sup>, Kazutaka KITAURA<sup>1</sup>, Hiroshi YAMASHITA<sup>1</sup>, Hitomi AYABE<sup>1</sup>, Hiroyuki SATO<sup>1</sup>, Yuichi MORITA<sup>1</sup>, Tadasu SHINI<sup>2,3</sup>, Ryuji SUZUKI<sup>1,3</sup> (<sup>1</sup>Repertoire Genesis Incorporation, <sup>2</sup>BITS. Co., Ltd., <sup>3</sup>Clinical Research Center for Rheumatology and Allergy, Sagami National Hospital)
- 26G-ISMS34** Cyclodextrin-based Supramolecular Drug Carriers and Active Pharmaceutical Ingredients  
 ○ Taishi HIGASHI<sup>1</sup>, Keiichi MOTOYAMA<sup>1</sup>, Hidetoshi ARIMA<sup>1,2</sup> (<sup>1</sup>Department of Physical Pharmaceutics, Graduate School of Pharmaceutical Sciences, Kumamoto University, <sup>2</sup>Program for Leading Graduate Schools "HIGO (Health life science: Interdisciplinary and Global Oriented) Program", Kumamoto University)
- 26G-ISMS35** Antifungal Activities and Nonclinical Pharmacokinetics of APX001A/APX001 (E1210/E1211), a New Broad-Spectrum Antifungal, with a New Mode of Action  
 ○ Takaaki HORII<sup>1</sup> (<sup>1</sup>Global Health Research Section, hhc Data Creation Center, Eisai Co., Ltd.)
- 26G-ISMS36** Synthesis and Evaluation of Potent, Orally Available, Well-balanced EP2 and EP3 Dual Agonists  
 ○ Akihiro KINOSHITA<sup>1</sup>, Masato HIGASHINO<sup>1</sup>, Koji YOSHIDA<sup>1</sup>, Yoshiyuki ARATANI<sup>1</sup>, Akito KAKUUCHI<sup>1</sup>, Keisuke HANADA<sup>1</sup>, Hiroyuki TAKEDA<sup>1</sup>, Toshikiko NISHIYAMA<sup>1</sup>, Hidekazu MATSUYA<sup>1</sup>, Kazuyuki OHMOTO<sup>1</sup> (<sup>1</sup>Medicinal Chemistry Research Laboratories, Ono Pharmaceutical Co., Ltd.)
- 26G-ISMS37** Novel Development of Chemotherapy for Relapsed and Refractory AML Based on the Promising Functional Mechanism of Cytidine Analog, DFP-10917  
 ○ Masakazu FUKUSHIMA<sup>1</sup>, Kenzo IIZUKA<sup>1</sup>, Chung ZHANG<sup>1</sup>, Cheng JIN<sup>1</sup>, Kiyoshi ESHIMA<sup>1</sup> (<sup>1</sup>Division of Research and Development, Delta-Fly Pharma, Inc.)
- 26G-ISMS38** System-wide Temporal Characterization of the Phosphoproteome of Non-small-cell Lung Cancer Cells Treated with Erlotinib  
 ○ Adachi JUN<sup>1</sup>, Yuichi ABE<sup>1</sup>, Maiko SHIMIZU<sup>1</sup>, Marina KISHIDA<sup>1</sup>, Ayako SATO<sup>1</sup>, Takeshi TOMONAGA<sup>1</sup> (<sup>1</sup>Laboratory of Proteome Research National Institutes of Biomedical Innovation, Health and Nutrition)
- 26G-ISMS39** Identification of WAC-224, a Novel Anticancer Quinolone as a Human Topoisomerase II Inhibitor  
 ○ Tomonori YAMAGUCHI<sup>1</sup>, Kenji ITOH<sup>1</sup>, Taichi UESHIMA<sup>1</sup>, Rumiko SHIMABARA<sup>1</sup>, Yohei KAWAKUBO<sup>1</sup>, Masayuki SATO<sup>1</sup>, Junpei YAMASHITA<sup>1</sup>, Tatsuya HIRANO<sup>1</sup>, Akira YAZAKI<sup>1</sup> (<sup>1</sup>Drug Discovery Laboratory, Wakunaga Pharmaceutical Co., Ltd.)
- 26G-ISMS40** Lenvatinib Mesilate (LEN) Enhanced Antitumor Activity of a PD-1 Blockade Agent by Potentiating Th1 Immune Response  
 ○ Yu KATO<sup>1</sup>, Xingfeng BAO<sup>2</sup>, Shannon MACGRATH<sup>2</sup>, Kimiyo TABATA<sup>1</sup>, Yusaku HORI<sup>1</sup>, Sho TACHINO<sup>1</sup>, Mark MATIJEVICI<sup>2</sup>, Yasuhiro FUNAHASHI<sup>1</sup>, Junji MATSUI<sup>1</sup> (<sup>1</sup>Eisai Co., Ltd., Tsukuba, Ibaraki, Japan, <sup>2</sup>Eisai Inc. Andover, MA, USA)
- 26G-ISMS41** Identification of Blood-based Gene Expression Biomarkers for Major Depressive and Bipolar Disorders  
 ○ Seiji NAKAMURA<sup>1</sup>, Hiroaki HORI<sup>2</sup>, Yohei ISHIZAWA<sup>1</sup>, Kenichi MATSUBARA<sup>1</sup>, Ryo MATOBA<sup>1</sup>, Hiroshi KUNUGI<sup>2</sup> (<sup>1</sup>DNA Chip Research Inc., <sup>2</sup>Department of Mental Disorder Research, National Institute of Neuroscience, National Center of Neurology and Psychiatry)

- 26G-ISMS42 Anti-*Helicobacter Pylori* Activity of a Novel Derivative of Intervenin**  
○ Tomokazu OHISHI<sup>1</sup>, Toru MASUDA<sup>1</sup>, Shun-ichi OHBA<sup>1</sup>, Chigusa HAYASHI<sup>2</sup>, Hikaru ABE<sup>3</sup>, Masayuki IGARASHI<sup>2</sup>, Takumi WATANABE<sup>3</sup>, Daniel Ken INAOKA<sup>4</sup>, Kiyoshi KITA<sup>5</sup>, Masakatsu SHIBASAKI<sup>3</sup>, Manabu KAWADA<sup>1,6</sup> (<sup>1</sup>Institute of Microbial Chemistry (BIKAKEN), Numazu, Microbial Chemistry Research Foundation, <sup>2</sup>Institute of Microbial Chemistry (BIKAKEN), Laboratory of Microbiology, Microbial Chemistry Research Foundation, <sup>3</sup>Institute of Microbial Chemistry (BIKAKEN), Laboratory of Synthetic Organic Chemistry, Microbial Chemistry Research Foundation, <sup>4</sup>Center for International Collaborative Research, Nagasaki University, <sup>5</sup>School of Tropical Medicine and Global Health, Nagasaki University, <sup>6</sup>Institute of Microbial Chemistry (BIKAKEN), Laboratory of Oncology, Microbial Chemistry Research Foundation)
- 26G-ISMS43 Discovery of Novel 5,6,7,8-tetrahydro[1,2,4]Triazolo[4,3-*a*]Pyridine Derivatives as  $\gamma$ -secretase Modulators**  
○ Takafumi TAKAI<sup>1</sup>, Tatsuki KOIKE<sup>1</sup>, Minoru NAKAMURA<sup>1</sup>, Yasutaka HOASHI<sup>1</sup>, Yoshihide TOMATA<sup>1</sup>, Sachie MORIMOTO<sup>1</sup>, Yuichi KAJITA<sup>1</sup>, Toshiro YAMASHITA<sup>1</sup>, Naohiro TAYA<sup>1</sup>, Tetsuya TSUKAMOTO<sup>1</sup>, Tomomichi WATANABE<sup>1</sup>, Koji MURAKAMI<sup>1</sup>, Tomoko IGARI<sup>1</sup>, Makoto KAMATA<sup>1</sup> (<sup>1</sup>Takeda Pharmaceutical Company Limited)
- 26G-ISMS44 Regulatory Science for R&D Promotion of Innovative Pharmaceuticals\***  
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