THE 19th ANNUAL MEETING
JSGT2013
JAPAN SOCIETY OF GENE THERAPY

Program & Abstracts

Date
July 4-6, 2013

Venue
OKAYAMA CONVENTION CENTER
14-1, Ekimotomachi, Kita-ku, Okayama, 700-0024, Japan

JSGT Home-page URL: http://jsgt.jp
PROGRAM

JSGT
Presidential Lecture

Toshiyoshi Fujiwara (Okayama University Graduate School of Medicine)
Cancer Gene Therapy: Two Decades and Future

Board Chairman’s Lecture

Yasufumi Kaneda (Osaka University Graduate School of Medicine)
What will be needed in gene therapy in Japan?

Special Lecture I (E)

David W. Russell (University of Washington, USA)
Genetic engineering of human pluripotent stem cells

Special Lecture II (E)

Denise K. Gavin (US Food and Drug Administration, USA)
Gene therapy – Past and present

Special Lecture III (E)

John J. Nemunaitis (Mary Crowley Cancer Research Centers, USA)
Gene based vaccines: Insights from ongoing trials

Special Lecture IV (E)

Dmitry M. Shayakhmetov (University of Washington School of Medicine, USA)
Functional role of blood coagulation factor binding to adenovirus vectors

Educational Lecture I

Yoshiki Sawa (Osaka University Graduate School of Medicine)
A promising regenerative therapy for severely damaged myocardium using cell sheet technology
~Up to date and perspective of stem cell therapy ~

Educational Lecture II

Koji Kawakami (Kyoto University)
Clinical research environment and clinical/pharmacoepidemiology
Educational Lecture III

Sakura Tanaka (Ministry of Health, Labor and Welfare)
The national strategy to overcome rare and intractable disease
~Approach from medical research to clinical application~

Main Symposium (E)
Regulation of the Gene Therapy Products in the US and Japan

MS-1. Denise K. Gavin (US Food and Drug Administration, USA)
FDA regulatory approach to gene therapy clinical trials

MS-2. Robert E Sobol (P53 Inc and VirRx Inc, USA)
Clinical development of tumor suppressor and oncolytic adenoviral cancer therapies

MS-3. Haruko Yamamoto (National Cerebral & Cardiovascular Center)
Needs for harmonization among regulatory systems and other obstacles: a case study in medical devices

MS-4. Teruyo Arato (Hokkaido University School of Medicine)
Current situation of the regulation of the gene therapy products in Japan

MS-5. Ryuichi Morishita (Department of Clinical Gene Therapy, Osaka University)
Change in regulatory process of regenerative medicine & gene therapy in Japan

Symposium I (E)
Gene and Vector-based Molecular Imaging

S1-1. Robert M. Hoffman (AntiCancer Inc., University of California, San Diego, USA)
Glowing tumors make for better detection and resection

S1-2. Lily Wu (University of California, Los Angeles, USA)
Reporter gene imaging directed by transcription-targeted vectors to detect cancer metastasis

S1-3. Shinae Kondoh (Tokyo Institute of Technology)
Imaging of hypoxia-inducible factor activity in cancer models

S1-4. Takahiro Ochiya (National Cancer Center Research Institute)
Functional imaging of cancer-specific exosomes in tumor metastasis

S1-5. Masato Yamamoto (University of Minnesota)
Novel theranostic for imaging and treatment of pancreatic cancer
Symposium II (E)
Genetic Diseases
Date: July 5, 2013, 8:30-11:00, Hall A
Chairpersons: Akihiro Kume & Masafumi Onodera

S2-1. Toshinao Kawai (National Center for Child Health and Development)
Gene therapy for chronic granulomatous disease

S2-2. Hirokazu Hirai (Gunma University Graduate School of Medicine)
Progress of spinocerebellar ataxia research on pathology, model animals and gene/stem cell therapies: Toward clinical application

S2-3. Yasuhiro Ikeda (Graduate School of Medical Sciences, Kyushu University)
Phase I, clinical study of a third-generation simian immunodeficiency virus (SIV)-based lentiviral vector carrying human PEDF gene for patients with retinitis pigmentosa

S2-4. Hiroaki Mizukami (Jichi Medical University)
Hemophilia gene therapy – Recent progress and current perspectives

S2-5. Torayuki Okuyama (National Center for Child Health and Development)
Gene therapy for inherited metabolic diseases

Symposium III (E)
Asian Cancer Symposium
Date: July 6, 2013, 8:30-10:30, Hall A
Chairpersons: Masatoshi Tagawa & Yoshikazu Yonemitsu

S3-1. Wei-Wei Zhang (Acrotics Corporation, USA)
Adenoviral-vector-mediated cancer gene therapy: Technologies and clinical applications

S3-2. Chae-Ok Yun (Hanyang University, Korea)
Reprogrammed viruses as cancer gene therapeutics: targeted, armed, and shielded.

S3-3. Liang Min (TOTBIOPHARM Company Ltd, China)
Gene therapy progress in China

S3-4. Li Yang (Sichuan University, China)
Progress in gene and cell therapy in China

Symposium IV (E)
Regenerative Medicine
Date: July 6, 2013, 13:00-15:00, Hall A
Chairpersons: Mahito Nakanishi & Makoto Otsu

S4-1. Koji Eto (Center for iPS Cell Research and Application (CiRA), Kyoto University)
Two modes of platelet biogenesis in mice detectable by two-photon imaging system

S4-2. Masayo Takahashi (Center for Developmental Biology, RIKEN)
Application of iPS cells for retinal diseases

S4-3. Wado Akamatsu (Keio University School of Medicine)
iPS technology-based regenerative medicine for damaged central nervous system

S4-4. Katsuto Tamai (Stem Cell Science, Graduate School of Medicine, Osaka University)
Regenerative medicine for epidermolysis bullosa: from discovery to recovery
Symposium V (E)
Cancer Therapy

Date: July 6, 2013, 15:00-17:00, Hall A
Chairpersons: Hideaki Tahara & Toshihiko Wakabayashi

S5-1. Tomoki Todo (The Institute of Medical Science, The University of Tokyo)
Clinical development of a third-generation oncolytic HSV-1 (G47Δ) for brain tumors and rare cancers

S5-2. Hideki Kasuya (Nagoya University Graduate School of Medicine)
Combination therapy of HF10 with Erlotinib and Gemcitabine as preclinical data for next clinical trial

S5-3. Masatoshi Tagawa (Chiba Cancer Center Research Institute)
Updated gene therapy for malignant mesothelioma: challenges for the intractable cancer

S5-4. Katsuyuki Hamada (School of Medicine, Ehime University)
Cancer gene therapy with oncolytic adenovirus by cell and polymer processing


4th Takara Bio Award Lecture

Date: July 4, 2013, 11:30-11:45, Hall A
Chairperson: Yasufumi Kaneda

Kenya Kamimura (Graduate School of Medical and Dental Sciences, Niigata University)
“Novel electric power-driven hydrodynamic injection system for gene delivery: safety and efficacy of human factor ix delivery in rats.”
Plenary Session (E) (Abstracts PS1–PS6)

Date: July 4, 2013, 10:00-11:30, Hall A
Chairpersons: Noriyuki Kasahara & Kenzabro Tani

PS-1. A phase IIb clinical study of tiessugene-C (TG-C) in patients with osteoarthritis

PS-2. Vaccination with irradiated induced pluripotent stem cells genetically engineered to secrete GM-CSF provides substantial antitumor immunity in immunocompetent syngeneic mouse models

PS-3. Ex vivo generation of highly purified and activated NK cells from human peripheral blood
Saito S., Harada Y., Yonemitsu Y.

PS-4. Systemic cancer virotherapy with MDVV, a combined miRNA-regulated and thymidine kinase-deleted oncolytic vaccinia virus
Nitta N., Okada N., Goto I., Yamane M., Nakatake M., Kurokaki H., Nakamura T.

PS-5. Syncytial mutations augment the oncolytic potential of a fully retargeted herpes simplex virus vector

PS-6. Generation of muscular dystrophy NHP model with rAAV 1 and 9-mediated transduction of common marmoset
Okada H., Ishibashi H., Hayashita-Kinoh H., Chiyo T., Nitahara-Kasahara Y., Okada T., Takeda S.

Day 1: July 4, 2013

Oral Session 1 (Abstracts OR7–OR12)
Genetic Diseases I

16:00-17:00, Hall B
Chairpersons: Fumio Endo & Torayuki Okuyama

OR-7. Elucidation of pathophysiological mechanisms in Wiskott Aldrich Syndrome using induced pluripotent stem cells (iPSC)
Amirhosseini M. K., Otsu M., Nakauchi H.

OR-8. Anti-inflammatory therapeutic approach using multipotent mesenchymal stromal cells for the treatment of duchenne muscular dystrophy
Nitahara-Kasahara Y., Hayashita-Kinoh H., Chiyo T., Okada H., Okada T., Takeda S.

OR-9. Immune tolerance induction by transplacental transmission of rAAV-microdystrophin in canine X-linked muscular dystrophy
Hayashita-Kinoh H., Okada H., Nitahara-Kasahara Y., Chiyo T., Yugeta N., Okada T., Takeda S.

OR-10. Dry run of ex vivo transduction and expansion of human hematopoietic stem/progenitor cells toward stem cell gene therapy for chronic granulomatous disease
Yamamoto M., Kawai T., Onodera M.

OR-11. Enzyme replacement therapy enhanced a therapeutic efficacy of bone marrow transplantation in MPS II mouse.

OR-12. Defining the threshold of rAAV-mediated gene transfer required to protect against hyperammonaemia in mouse models of urea cycle defects
Kok C., Cunningham S., Alexander I.
Oral Session 2 (Abstracts OR13~OR18)
Other Diseases

Chairpersons: Makoto Inoue & Shin-ichi Muramatsu

17:00-18:00, Hall B

OR-13. Oral administration of genetically modified bifidobacterium displaying HCV-NS3 multi-epitope fusion protein can induce the HCV-NS3 specific systemic immune response in mice
Omoto C., Kitagawa K., Takei S., Morishita N., Katayama T., Hotta H., Kawabata M., Shirakawa T.

OR-14. Nonhuman primate model for HIV-1 gene therapy using endoribonuclease MazF transduced CD4+ T cells in the presence of SHIV 89.6P infection
Saito N., Chono H., Shibata H., Ageyama N., Yasutomi Y., Mineno J.

OR-15. Endogenous mesenchymal stem cells accelerate engraftment and regeneration of the skin graft
Aikawa E., Fujita R., Inuma S., Kikuchi Y., Saga K., Uchida Y., Kaneda Y., Tamai K.

OR-16. Widespread neuronal transduction in the primate brain via intrathecal administration of adeno-associated virus vectors
Iida A., Takino N., Miyachi H., Shibata H., Ono F.,Muramatsu S.

OR-17. siRNA targeting vascular endothelial growth factor by adeno-associated vector (type 8) efficiently inhibits neovascularization in a murine choroidal neovascularization model
Igarashi T., Miyake N., Iijima O., Fujimoto C., Shimada T., Takahashi H., Miyake K.

OR-18. rAAV8/9-mediated muscle transduction with tacrolimus in non-human primates

Day 2: July 5, 2013

Oral Session 3 (Abstracts OR19~OR23)
Cancer I

Chairpersons: Akinobu Gotoh & Katsuyuki Hamada

8:30-9:20, Hall B

OR-19. A phase I/IIa study of REIC/Dkk-3 (reduced expression in immortalized cells) gene therapy for prostate cancer; Challenges in establishing REIC/Dkk-3 as a cancer vaccine.

OR-20. Identification of mesenteric hematopoiesis where is the metastatic niche of tumor dissemination
Harada Y., Morodomi Y., Kasagi Y., Saito S., Yoshida K., Maeda N., Yonemitsu Y.

OR-21. Novel immuno-virotherapy: Tumor-specific killer activity of oncolytic adenovirus-loaded T cell line HOZOT

OR-22. Radiosensitization of glioma cells after intracellular generation of 5-fluorouracil by prodrug activator gene therapy with a non-lytic retroviral replicating vector

OR-23. The integrin antagonist cilengitide increases anti-tumor effects of vasculostatin-expressing oncolytic virus
Oral Session 4 (Abstracts OR24-OR28)
Cancer II
9:20-10:10, Hall B
Chairpersons: Kazunori Aoki & Masaaki Mizuno

OR-24. Gene therapy using retroviral replicating vectors in CNS metastasis of breast cancer

OR-25. A novel chimeric antigen receptor targeting GM-CSF receptor for the treatment of juvenile myelomonocytic leukemia
Nakazawa Y., Sueki A., Matsuda K., Sakashita K., Koike K.


OR-27. Infection with dual microRNA-targeted coxsackievirus B3 abrogates ITS pathogenicity retaining oncolytic activity

OR-28. Usefulness of microRNA-375 as a prognostic and therapeutic tool in esophageal squamous cell carcinoma

Oral Session 5 (Abstracts OR29-OR33)
Cancer III
10:10-11:00, Hall B
Chairpersons: Ken-ichiro Kosai & Tomoki Todo

OR-29. Adenovirus-mediated REIC/Dkk-3 gene therapy induces tumor antigen-specific cytotoxic T-cell activation in mouse cancer models

OR-30. Potent in vitro bystander effect and migratory activity in the suicide gene therapy using Muse cells transduced with herpes simplex virus-thymidine kinase gene and ganciclovir
Namba H., Yamazoe T., Yamasaki T., Koizumi S., Amano S., Wakao S., Tsuchiyama K., Dezawa M.

OR-31. Bisphosphonates and Nutlin-3a augments cytotoxicity induced by adenovirally expressed p53 in p53 wild-type mesothelioma

OR-32. Induction of an angiogenec factor, Cyr61, in oncolytic viral therapy for malignant gliomas.

OR-33. A clinical development of a third-generation oncolytic HSV-1 G47Δ for patients with castration resistant prostate cancer
Fukuhara H., Homma Y., Ino Y., Todo T.
OR-34. CD106+/CD44+ mesenchymal stromal cells in bone marrow are recruited to preserve muscle function through the inhibition of severe fibrosis in mdx mice.
Fujita R., Tamai K., Aikawa E., Kikuchi Y., Kaneda Y.

OR-35. Tbx18 and Wt1 control the epicardial epithelial-mesenchymal transition through bi-directional regulation of Slug
Nakagami H., Takeichi M., Nimura K., Kaneda Y.

OR-36. The effect of ZFP809 on gene silencing depends on primer-binding site located downstream MoMLV type retroviral vectors
Ichida Y., Sato T., Onodera M.

OR-37. The mechanism of a transcriptional repressor, ZFP809, for induction of gene silencing in the transduced cells
Utsunomiya Y., Ichida Y., Yamamoto Y., Onodera M.

OR-38. Generation of transgenic mice with human AAVS1 sequence
Urabe M., Miyata S., Tominaga T., Tsukahara T., Mïzukami H., Kume A., Ozawa K.

Ozaki S., Kitagawa K., Shirosaki C., Morishita N., Katayama T., Kawabata M., Shirakawa T.

OR-40. Novel DNA vaccine platform: Tumor-associated antigen/adjuvant genes-loading polyplex micelle for cancer therapy
Nakano K.

OR-41. The p53-specific CTL induced by Ad-p53 infected dendritic cells showed the high cytotoxicity in p53-overexpressed and Ad-p53 infected tumor cell lines.
Saito H., Yamasaki R., Morishita N., Kawabata M., Bautista D., Dator D., Shirakawa T.

OR-42. Interferon-expressing oncolytic adenovirus sensitized chemotherapy and radiation for pancreatic cancer in vitro and in vivo models.
Han J., Shanley R., Xianghua L., Aoki K., Vickers S. M., Yamamoto M., Davydova J.

OR-43. Analysis of combination therapy of the adenovirus vector carrying REIC/Dkk-3 (Ad-REIC) and the integrin antagonist cilengitide

OR-44. Midkine promoter-driven oncolytic adenovirus with adenovirus 35 fiber modification achieves enhanced transduction of human osteosarcoma cells

OR-45. Alpharetroviral vectors: Demonstration of safe and efficacious gene therapy using X-CGD iPSCs.
Lin H-T., Otsu M., Nakauchi H.
Oral Session 8 (Abstracts OR46~OR51)
Vector I
13:00-14:00, Hall B
Chairpersons: Hiroyuki Mizuguchi & Hiroaki Mizukami

OR-46. Development of a targeted adenovirus vector displaying a human fibronectin type III domain-based monobody in a fiber protein
Matsui H., Sakurai F., Katayama K., Abe Y., Machitani M., Kurachi S., Tachibana M., Mizuguchi H.

OR-47. Pharmacokinetic analysis of 11 AAV serotypes and 134 AAV mutants in one rhesus macaque by deep sequencing

OR-48. Improving the adenovirus vector-mediated RNAi efficiency by lacking the expression of virus-associated RNAs
Machitani M., Sakurai F., Tachibana M., Katayama K., Matsui H., Suzuki T., Mizuguchi H.

OR-49. TANK-binding kinase 1 regulates adenovirus-induced innate immune response
Tsuzuki S., Yamaguchi T., Shoji M., Tachibana M., Sakurai F., Kobiyama K., Ishii K. J., Akira S., Mizuguchi H.

OR-50. Systemic administration of fiber redesigned infectivity-selective oncolytic adenovirus for cancer treatment
Miura Y., Han J., Davydova J., Yamamoto M.

OR-51. New efficient method to produce a peptide-displaying adenovirus library
Yamamoto Y., Goto N., Miura K., Narumi K., Ohnami S., Miura Y., Yamamoto M., Aoki K.

Oral Session 9 (Abstracts OR52~OR57)
Vector II
14:00-15:00, Hall B
Chairpersons: Yumi Kanegae & Hiroyuki Nakai

OR-52. Pancreatic cancer therapy by systemic administration of soluble Flt-1 messenger RNA delivery using polyplex nanomicelles
Kinoh H., Uchida S., Matsui A., Ishii T., Cabral H., Itaka K., Kataoka K.

OR-53. Reduction in the leaky expression of adenovirus genes and hepatotoxicity following administration of a replication-incompetent adenovirus vector by incorporation of miR-122a-targeted sequences into the 3’-untranslated region of the E4 gene
Shimizu K., Sakurai F., Nakamura S., Nagamoto Y., Tomita K., Tachibana M., Mizuguchi H.

OR-54. Efficient detection of circulating tumor cells using an oncolytic adenovirus containing microRNA-regulated gene expression system
Sakurai F., Narii N., Tomita K., Tachibana M., Urata Y., Fujiwara T., Mizuguchi H.

OR-55. Efficient production of adenovirus vector lacking genes of virus-associated RNAs that disturb cellular RNAi machinery
Kondo S., Maekawa A., Pei Z., Suzuki M., Saito I., Kanegae Y.

OR-56. Development of SIN retroviral vectors equipped with switch promotors driven by activation signals from the chimeric antigen receptors.

OR-57. Novel chimeric antigen receptors with signaling domain of glucocorticoid-induced TNF-receptor.
Okamoto S., Amaishi Y., Oshikawa T., Nukaya I., Kurosawa Y., Shiku H., Mineno J.
Poster Sessions

Date: July 5, 2013, 18:00-18:30, Poster Hall
Chairperson: Junichi Mineno

Poster Session 1 (Abstracts: PO58~PO62)
Vector III

PO-58. Disruption of metabotropic glutamate receptor signaling and rescue through intravasculcar administration of AAV9 in a mouse model of spinocerebellar ataxia type 3
Konno A., Shuvaev A. N., Miyake N., Miyake K., Yanagi S., Shimada T., Hirai H.

PO-59. Effective and safe TCR gene therapy with silencing endogenous TCRs and high affinity TCR variants.

PO-60. Successful systemic cancer targeting by adenovirus vector with AB-loop redesigned fiber via reducing liver sequestration
Miura Y., Han J., Davydova J., Yamamoto M.

PO-61. Advanced two-step transcriptional amplification as a novel system for cancer-specific gene expression and imaging

PO-62. Synergistic antitumor effect of the combination of adenoviral gene therapy and immunotherapy for head and neck cancer

Date: July 5, 2013, 18:30-19:00, Poster Hall
Chairperson: Toshiro Shirakawa

Poster Session 2 (Abstracts: PO63~PO67)
Vector IV

PO-63. Tolerance induction to arylsulfatase A by AAV mediated neonatal gene transfer into MLD model mice
Miyake N., Miyake K., Yamamoto M., Shimada T.

PO-64. Oncolytic effects of a fiber knob substituted adenovirus vector to human lung cancer cells
Nagaya H., Kanno T., Hiwasa K., Nakagawa Y., Shimomura K., Nakano T., Nishizaki T., Tagawa M., Gotoh A.

PO-65. Robust and cell type-specific transgene expression by applying tetracycline-controlled system to AAV
Yamaguchi T., Konno A., Miyake N., Miyake K., Shimada T., Hirai H.

PO-66. A super gene expression system strongly enhances the anticancer effects of the REIC/Dkk-3 encoding adenoviral vector

PO-67. Development of a powerful gene expression system using hTERT, SV40 and CMV triple translational enhancers
Poster Session 3 (Abstracts: PO68–PO72)
Vector V

PO-68. Evaluation by the electron microscope of the oncolytic adenovirus by polymer multiplex processing treatment
Takagi K., Hamada K., Ito T., Yoshihara C., Koyama Y., Tani K., Nawa A.

PO-69. Global and effective gene delivery of neprilysin to the brain via intravascular administration of AAV vector in Alzheimer’s disease mice

PO-70. Identification and characterization of nucleolar localization signals of Assembly-Activating Protein of AAV2

PO-71. Adenovirus-mediated induction of exogenous HER2 extracellular domain overcomes resistance to trastuzumab via ADCC activation in human cancer cells

PO-72. Neotargeting HER2 negative cancer cells with Trastuzumab-based photoimmunotherapy by virally transduction of HER2-extracellular domain

Poster Session 4 (Abstracts: PO73–PO77)
Cancer IV

PO-73. Differential susceptibility of cancer stem cells and cancer cells undergoing epithelial-mesenchymal transition to oncolysis by CVB3 infection

PO-74. A new therapeutic strategy for oral squamous cell carcinoma using G47Δ, a third generation oncolytic herpes simplex virus type 1
Uchihashi T., Nakahara H., Ino Y., Fukuhara H., Kogo M., Todo T.

PO-75. A novel apoptotic mechanism of genetically engineered adenovirus-mediated tumor-specific p53 overexpression through E1A-dependent p21 and MDM2 suppression

PO-76. An armed oncolytic herpes simplex virus expressing thrombospondin-1 has an enhanced in vivo antitumor effect against human gastric cancer
Nakamori M., Tsuji T., Matsumura S., Kato T., Ino Y., Todo T., Yamae H.

PO-77. Dual cell death pathways induced by p53 transactivation overcome resistance to oncolytic adenovirus in human osteosarcoma cells
Poster Session 5 (Abstracts: PO78–PO82)  
**Cancer V**

**PO-78. Plasmacytoid dendritic cells play an essential role in GM-CSF-induced antitumor immunity**  

**PO-79. Tumor targeting and anti-tumor activity mediated by T-lymphocytes with CD19-specific CAR in human B-cell lymphoma models**  

**PO-80. Roles of IL-21 in engineered T cell therapy against B cell lymphoma**  

**PO-81. Development of Thrombospondin 1 shRNA as anti-cancer agent**  
Weng T-Y., Huang S-S., Yen M-C., Lai M-D.

**PO-82. Aspects of nonviral gene therapy: Correlation of molecular parameters with lipoplex structure and transfection efficacy in pyridinium-based cationic lipids.**  

Date: July 5, 2013, 18:30-19:00, Poster Hall  
Chairperson: Kazuhiro Tomizawa

Poster Session 6 (Abstracts: PO83–PO87)  
**Cancer VI**

**PO-83. Cell-penetrating D-isomer peptides consisting of Pas and the p53 C-terminus induce autophagic cell death of glioma-initiating cells**  

**PO-84. Induction of in vivo synthetic lethal RNAi responses to treat glioblastoma.**  
Michiue H., Nishiki T., Ohmori I., Dowdy S. F., Matsui H.

**PO-85. EGFP peptides inhibit the glioblastoma cell proliferation by protein transduction therapy.**  
Akada S., Michiue H., Yamaguchi A., Nishiki T., Ohmori I., Matsui H.

**PO-86. MicroRNA-133A regulates both fascin and MT-1 MMP and suppresses proliferation and invasion of esophageal squamous cell carcinoma**  

**PO-87. Tumor suppressor FHIT regulates tumor invasion of pancreatic cancer cells via inhibiting association of Ezrin and Actin cytoskeleton**  
Nishizaki M., Tazawa H., Kuroda S., Kishimoto H., Kagawa S., Fujiwara T.
Poster Session 7 (Abstracts: PO88-PO92)
Cancer VII

PO-88. An Histone deacetylase inhibitor enhances cancer therapeutic efficiency of RNA polymerase III promoter driven-short hairpin RNA of Indoleamine 2,3-dioxygenase
Yen M-C., Weng T-Y., Lai M-D.

PO-89. Accumulation of epigenetic alteration could predict malignant formation in Intraductal Papillary Mucinous Neoplasm (IPMN)

PO-90. Combination treatment using andenovirus-mediated CD40 ligand gene delivery and NF-κB inhibitor for pancreatic cancer

PO-91. Oncolytic virus therapy using recombinant HSV-1 for nonseminoma germ cell tumors
Kakutani S., Fukuhara H., Takeshima Y., Homma Y., Ino Y., Todo T.

PO-92. Chemosensitizing effects of telomerase-specific oncolytic adenovirus in human osteosarcoma cells

Date: July 5, 2013, 18:30-19:00, Poster Hall
Chairperson: Yasushi Ino

Poster Session 8 (Abstracts: PO93-PO96)
Cancer VIII

PO-93. Combination of the epidermal growth factor receptor tyrosine kinase inhibitor Erlotinib and intratumoral injection of oncolytic herpes simplex virus HF10 as a treatment strategy against human pancreatic cancers

PO-94. Combination of herpes simplex virus type 1 mutant HF10 with anti-CTLA-4 antibody enhanced anti-tumor effects and improved mouse survival time
Tsuda H., Huang S., Kohno S., Furui S., Inoue K., Ishihara M., Muraoka D., Shiku H., Mineno J.

PO-95. Combination effect of oncolytic herpes virus HF10 with Bevacizumab against human breast carcinoma xenograft

PO-96. Antitumor effect of combination therapy with telomerase-specific oncolytic adenovirus and zoledronic acid in human osteosarcoma cells
PO-97. A novel, fecal DNA methylation assay for the identification of a multiple gastrointestinal cancers including pancreatic cancer

PO-98. MGMT methylation as a novel biomarker for the identification of stage III colorectal cancers at high-risk of disease recurrence following curative surgery

PO-99. Cytokeratin-19 staining is a novel, predictive biomarker for extra-hepatic metastasis in hepatocellular carcinoma

PO-100. A biological imaging system for detecting genetic alterations in circulating tumor cells using telomerase-specific replication-competent adenovirus
Shigeyasu K., Hashimoto Y., Uno F., Kagawa S., Tazawa H., Nagasaka T., Mizuguchi H., Urata Y., Fujiwara T.

PO-101. Genetic and epigenetic alterations in the netrin-1 receptors, UNC5c and DCC, constitutes a previously unrecognized pathway in gastric cancer progression

PO-102. Differential treatment strategies for advanced colorectal cancer according to mutation spectrum in the Ras-Raf signaling pathway and microsatellite instability

PO-103. A simple detection system for adenovirus receptor expression using a telomerase-specific replication-competent adenovirus

PO-104. Novel strategy for eradicating lymph node metastasis of early-stage colorectal cancers using telomerase-dependent replicating adenoviral agent

PO-105. Preclinical evaluation of cytotoxic fluorescent protein KillerRed as novel photosensitizer in photodynamic therapy for cancer
Takehara K., Tazawa H., Hashimoto Y., Kishimoto H., Narii N., Mizuguchi H., Fujiwara T.
Poster Session 11 (Abstracts: PO106–PO110)
Genetic Diseases II & Basic Science III

PO-106. Disruption of metabotropic glutamate receptor signaling in Purkinje cells expressing a lentivirally transduced mutant SCA1
  Anton S.

PO-107. Non-myeloablative preconditioning with ACK2 for cell therapy for Hunter disease
  Yokoi T.

PO-108. Route of AAV9 vector introduction decides the distribution patterns of transduced cell in the cerebellum: Implication of gene therapy approaches for cerebellar disease
  Huda F., Konno A., Matsuzaki Y., Goenawan H., Hirai H.

PO-109. Establishment of pancreatic stem cell line generated from fibroblast-derived iPS cells
  Kuise T., Noguchi H., Tazawa H., Kawai T., Fujiwara T.

PO-110. Generation of neurodegenerative disease model mice using the altered neuron-specific synapsin I promoter
  Matsuzaki Y., Oue M., Hirai H.
**Day I**

**Corporate Seminar-I**  
(Yakult Honsha Inc.)  
Date: July 4, 2013, 12:00-12:50, Hall A  
Chairperson: Hisahiro Matsubara (Chiba University)  
Masahiko Nishiyama  
(Gunma University)  
Molecular analysis and cancer therapeutics

**Corporate Seminar-II**  
(Merck Serono Inc. & Bristol-Myers Squibb)  
Date: July 4, 2013, 12:00-12:50, Hall B  
Chairperson: Hiroki Yamaue (Wakayama Medical University)  
Kazuto Nishio  
(Kinki University)  
The trend of the molecular target medicine and companion diagnosis

**Day II**

**Corporate Seminar-III**  
(Chugai Pharmaceutical Co., Ltd.)  
Date: July 5, 2013, 12:00-12:50, Hall A  
Chairperson: Shinae Kondoh (Tokyo Institute of Technology)  
Lily Wu  
(University of California, Los Angeles, USA)  
Refinements in Adenoviral Mediated Reporter Imaging Technology

**Corporate Seminar-IV**  
(Takara Bio Inc.)  
Date: July 5, 2013, 12:00-12:50, Hall B  
Chairperson: Junichi Mineno (Takara Bio Inc.)  
Hikaru Takakura  
(Takara Bio Inc.)  
Contract Development and Manufacturing Service -Comprehensive Services from Development through Manufacturing for Gene Therapy and Regenerative Medicine-

**Day III**

**Corporate Seminar-V**  
(Otsuka Pharmaceutical Co., Ltd.)  
Date: July 6, 2013, 12:00-12:50, Hall A  
Chairperson: Hideaki Shimada (Toho University)  
Eiji Kobayashi  
(Jichi Medical University)  
Pig Center for Gene Therapy in Japan

**Corporate Seminar-VI**  
(Oncolys BioPharma Inc.)  
Date: July 6, 2013, 12:00-12:50, Hall B  
Chairperson: Satoru Kyo (Kanazawa University)  
Hirosi Tazawa  
(Okayama University)  
Masahiro Takakura  
(Kanazawa University)  
Nobuyoshi Katagiri  
(Oncolys BioPharma Inc.)  
A novel adenovirus-based CTC detection technique and its clinical applications