THE 14th ANNUAL MEETING
2008

JAPAN SOCIETY OF
GENE THERAPY

PROGRAM AND ABSTRACTS

Date
June 12-14, 2008

Venue
Sapporo Medical University School of Medicine
(Main Hall & Auditorium)

South-1, West-16, Chuo-ku,
Sapporo

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

PROGRAM

Presidential Lecture

Date: June 13, 2008

11:00- 12:00, Main Hall

Chairperson: Yoshiro Niitsu

Michel Sadelain *(Memorial Sloan-Kettering Cancer Center)*

TARGETING TUMORS WITH GENETICALLY ENHANCED T LYMPHOCYTES

Special Lecture I

Recent Progress in Cardiovascular Gene Therapy

Date: June 12, 2008

14:00-15:30, Main Hall

Chairpersons: Yoshikatsu Eto, Kenzaburo Tani

1. ***Dale Ando*** *(Sangamo BioSciences, Inc.)*

EVIDENCE OF NEUROREGENERATION USING VASCULAR ENDOTHELIAL GROWTH FACTOR ZINC FINGER PROTEIN ACTIVATOR (SB-509) IN DIABETIC NEUROPATHY: A CHRONIC DEGENERATIVE POLYNEUROPATHY

Recent Progress in Cancer Gene Therapy (1)

2. ***Shirley M. Clift*** *(Cell Genesys, Inc.)*

IDENTIFICATION OF ANTIBODY RESPONSES INDUCED IN PATIENTS WITH METASTATIC HORMONE-REFRACTORY PROSTATE CANCER (mHRPC) RECEIVING GVAX IMMUNOTHERAPY FOR PROSTATE CANCER.

Special Lecture II

Recent Progress in Cancer Gene Therapy (2)

Date: June 14, 2008

13:00-14:00, Main Hall

Chairperson: Shigetaka Asano

1. ***David Kirn*** *(JENNEREX Biotherapeutics Inc.)*

ONCOLYTIC POXVIRUS PRODUCT CLASS: TARGETED & ARMED MULTI-MECHANISTIC THERAPEUTICS FOR CANCER

2. ***Tae-Ho Hwang*** *(Pusan National University Hospital)*

CONBINATIONAL THERAPY WITH JX-594 ONCOLYTIC VACCINIA VIRUS AND SORAFENIB (NEXAVAR) IN HUMAN HEPATOCELLULAR CANCER CELL LINES

Joint Symposium with
The Japanese Society of Gene Design and Delivery

Date: June 13, 2008

13:00-15:00, Main Hall

Chairpersons: Kazunori Kataoka, Takashi Shimada

1. ***Makoto Inoue*** *(DNAVEC Corporation)*

RECENT PROGRESS OF "CYTOPLASMIC GENE THERAPY" AND "CYTOPLASMIC GENE VACCINE THERAPY" USING SENDAI VIRUS VECTOR

2. ***Hirofumi Hamada*** *(Sapporo Medical University)*

ANTIBODY-TARGETED SELECTIVE GENE DELIVERY THROUGH FZ33 FIBER-MODIFIED ADENOVIRAL VECTORS

3. ***Yasutomo Nasu*** *(Okayama University Graduate School of Medicine)*

PROSTATE CANCER GENE THERAPY USING ADENOVIRUS VECTOR

4. ***Toshinori Sato*** *(Keio University)*
GENE DELIVERY SYSTEM USING CHITOSAN NANOPARTICLES

5. ***Keiji Itaka*** *(Graduate School of Medicine, University of Tokyo)*
INTRANUCLEAR SPECTROSCOPIC ANALYSIS OF DNA CONDENSATION STATE TO TRIGGER THE TRANSGENE EXPRESSION

6. ***Hidetaka Akita*** *(Hokkaido University)*
ANALYSIS OF INTRACELLULAR TRAFFICKING OF pDNA AND siRNA FOR A DEVELOPMENT OF NON-VIRAL VECTOR

Joint Symposium with the Asian Gene Therapy

Date: June 14, 2008
10:00-12:00, Main Hall
Chairpersons: Yasufumi Kaneda, Chae-Ok Yun

1. ***Takahiro Ochiya*** *(National Cancer Center Research Institute)*
MicroRNAs AS THERAPEUTIC TARGETS:
POTENTIAL EFFECT ON PROSTATE CANCER MANAGEMENT

2. ***Je-Ho Lee*** *(School of Medicine, Sungkyunkwan University)*
NOVEL TUMOR SUPPRESSORS INHIBIT TUMOR GROWTH AND ANGIOGENESIS IN GYNECOLOGICAL CANCER

3. ***Tomoki Todo*** *(University of Tokyo Hospital)*
CLINICAL DEVELOPMENT OF GENETICALLY-ENGINEERED ONCOLYTIC HSV-1

4. ***Moonsup Jeong*** *(Research Center of Dong-A Pharmaceutical Co., Ltd.)*
NOVEL CANCER GENE THERAPY FOR MALIGNANT GLIOMAS WITH ADENOVIRUS SECRETING TRIMERIC TRAIL

5. ***Tadashi Ariga*** *(Hokkaido University Graduate School of Medicine)*
HEMATOPOIETIC STEM CELL GENE THERAPY FOR TWO PATIENTS WITH ADA DEFICIENCY WITHOUT CYTOREDUCTIVE CONDITIONING

6. ***Joong Gon Kim*** *(Seoul National University College of Medicine)*
RETROVIRAL GENE THERAPY FOR CHRONIC GRANULOMATOUS DISEASE: PRELIMINARY DATA FROM PHASE I/II TRIAL

Educational Seminar I

Viral Vectors

Date: June 12, 2008
15:00-16:40, Auditorium
Chairperson: Kounosuke Mitani

1. ***Ko Mitani*** *(Research Center for Genomic Medicine, Saitama Medical University)*
RECENT TOPICS ON ADENOVIRAL VECTORS

2. ***Toshio Kitamura*** *(The Institute of Medical Science, University of Tokyo)*
HIGH-EFFICIENCY RETROVIRUS-MEDIATED GENE TRANSFER AND EXPRESSION CLONING: ITS APPLICATIONS IN A VARIETY OF EXPERIMENTS

3. ***Hiroyuki Miyoshi*** *(RIKEN BioResource Center)*
DEVELOPMENT OF LENTIVIRAL VECTORS AND CURRENT STATUS OF GENE THERAPY

4. ***Yasushi Kawaguchi*** *(International Research Center for Infectious Diseases, The University of Tokyo)*
HERPESVIRUS VECTORS-HOW TO GENERATE THE VECTORS

Educational Seminar II

Gene Therapy for Congenital Disorders

Date: June 13, 2008

9:00-10:40, Auditorium

Chairperson: Tadashi Ariga

1. ***Masafumi Onodera*** *(National Research Institute for Child Health and Development)*

HOW DO WE ADVANCE STEM CELL GENE THERAPY IN JAPAN?

2. ***Torayuki Okuyama*** *(National Center for Child Health and Development)*

GENE AND CELL THERAPY FOR MUCOPOLYSACCHARIDOSES

3. ***Akihiro Kume*** *(Jichi Medical University)*

GENE THERAPY FOR PHENYLKETONURIA

Educational Seminar III

Clinical Study of Gene Therapy in the USA

Date: June 13, 2008

13:00-14:40, Auditorium

Chairperson: Toshiyoshi Fujiwara

1. ***David Kirn*** *(Jennerex Biotherapeutics)*

ONCOLYTIC VIROTHERAPEUTICS FOR CANCER: A CENTURY OF PROMISE, A DECADE OF PROGRESS

2. ***Kenzaburo Tani*** *(Kyushu University Hospital)*

GENE THERAPY IN USA

3. ***Hideaki Tahara*** *(The University of Tokyo)*

STRATEGIES TO KEEP UP WITH US RESEARCHERS IN GENETHERAPY

Educational Seminar IV

AAV Vectors

Date: June 13, 2008

14:40-16:20, Auditorium

Chairperson: Keiya Ozawa

1. ***Masashi Urabe*** *(Jichi Medical University)*

BIOLOGY OF ADENO-ASSOCIATED VIRUS VECTORS — HOW DO THEY INFECT CELLS? HOW DO THEY TRAVEL WITHIN CELLS?

2. ***Takashi Okada*** *(National Center of Neurology and Psychiatry)*

SCALABLE PRODUCTION OF AAV VECTORS AND THERAPEUTIC APPROACHES TO DUCHENNE MUSCULAR DYSTROPHY

3. ***Koichi Miyake*** *(Nippon Medical School)*

ADENO-ASSOCIATED VIRUS (AAV) SEROTYPES: *IN VIVO* EXPRESSION AND TROPISM IN MICE

4. ***Hiroaki Mizukami*** *(Jichi Medical University)*

IMMUNE RESPONSES IN GENE THERAPY USING ADENO-ASSOCIATED VIRUS (AAV) VECTORS

Educational Seminar V

Non-viral Vectors

Date: June 14, 2008

13:00-14:40, Auditorium

Chairperson: Yasufumi Kaneda

1. ***Tomohiro Asai*** *(Graduate School of Pharmaceutical Sciences, University of Shizuoka)*

ANGIOGENIC VESSEL-TARGETED LIPOSOMES FOR *IN VIVO* DELIVERY OF siRNA

2. ***Kazunori Kataoka*** *(The University of Tokyo)*

SUPRAMOLECULAR NANODEVICE ASSEMBLED FROM SMART BLOCK COPOLYMERS AS NON-VIRAL GENE VECTOR

3. ***Shiroh Futaki*** *(Institute for Chemical Research, Kyoto University)*

DYNAMICS IN CELLULAR UPTAKE OF ARGININE-RICH PEPTIDES

4. ***Hideyoshi Harashima*** *(Faculty of Pharmaceutical Sciences, Hokkaido University)*

MULTIFUNCTIONAL ENVELOPE-TYPE NANO DEVICE FOR IN VIVO SYSTEMIC DELIVERY OF siRNA

Plenary Session I
(Abstracts 1~4)
Clinical Study

Date: June 12, 2008

11:00-12:00, Main Hall

Chairpersons: Torayuki Okuyama, Hideaki Tahara

1. ***Hideki Kasuya*** *(Nagoya University School of Medicine)*

ENDEAVOR FROM CLINICAL TRIAL USING HF10 AND BASIC EXPERIMENT

2. ***Toshiyoshi Fujiwara*** *(Okayama University Hospital)*

PHASE I TRIAL OF INTRATUMORAL ADMINISTRATION OF TELOMERASE-SPECIFIC ONCOLYTIC ADENOVIRUS OBP-301 IN PATIENTS WITH ADVANCED SOLID CANCER

3. ***Mayumi Iwata-Okada*** *(National Center for Child Health and Development)*

PROGRESS TOWARD CLINICAL TRIAL OF GENE THERAPY FOR CHRONIC GRANULOMATOUS DISEASE IN JAPAN

4. ***Shin-ichi Muramatsu*** *(Jichi Medical University)*

AROMATIC L-AMINO ACID DECARBOXYLASE GENE TRANSFER FOR PARKISON'S DISEASE: PRELIMINARY RESULTS OF AN OPEN-LABEL SAFETY STUDY

Plenary Session II
(Abstracts 5~10)
Cancer

Date: June 12, 2008

15:30-17:00, Main Hall

Chairpersons: Noriyuki Kasahara, Tatsutoshi Nakahata

5. ***Yukihiro Saito*** *(Graduate School of Medicine, Osaka University)*

COLD SHOCK DOMAIN PROTEIN A, NOVEL REPRESSOR OF TUMOR-ANGIOGENESIS AND -LYMPHANGIOGENESIS FOR CANCER GENE THERAPY.

6. ***Hiroki Hayashi*** *(Graduate School of Medicine, Osaka University)*

IDENTIFICATION OF ENDOGENOUS ANGIOGENIC REPRESSOR, FHL-2, VIA DIRECT INTERACTION WITH SPHINGOSINE KINASE-1 IN ENDOTHELIAL CELLS.

7. ***Hiroki Namba*** *(Hamamatsu University School of Medicine)*

p27 MODULATES MIGRATION AND TROPISM OF MESENCHYMAL STEM CELLS

8. ***Fuminori Sakurai*** *(National Institute of Biomedical Innovation)*

MIRNA-REGULATED EXPRESSION OF HERPES SIMPLEX VIRUS THYMIDINE KINASE PREVENTS HEPATOTOXICITY WITHOUT DISTURBING ANTITUMOR EFFECT IN ADENOVIRUS VECTOR-MEDIATED SUICIDE GENE THERAPY

9. ***Shuya Yano*** *(Okayama University Graduate School)*

A NOVEL TELOMERASE-SPECIFIC ONCOLYTIC VIROTHERAPY TARGETING GASTRIC CANCER STEM CELLS

10. ***Hiroaki. Kinoh*** *(Chiba University Graduate School of Medicine)*

UROKINASE-TARGETED ONCOLYTIC SENDAI VIRUS VECTOR EXPRESSING IFN-BETA SELECTIVELY ELIMINATES ESTABLISHED SQUAMOUS CELL CARCINOMA IN VIVO

Plenary Session III
(Abstracts 11~15)
Vector

Date: June 13, 2008

9:00-10:15, Main Hall

Chairpersons: Hirofumi Hamada, Masaaki Mizuno

11. ***Yoko Obara*** *(Jichi Medical University)*

UNEXPECTED SILENCING OF TRANSGENE INTEGRATED AT AAVS1 LOCUS USING AAV MACHINERY

12. ***Julia Davydova*** *(University of Minnesota)*

DEVELOPMENT OF THE MODELS FOR ASSESSING THE BEHAVIOR OF TROPISM-MODIFIED REPLICATION COMPETENT HUMAN ADENOVIRUSES.

13. ***Ken Nishimura*** *(National Institute of Advanced Industrial Science and Technology)*

CHARACTERIZATION OF NOVEL DEFECTIVE SENDAI VIRUS VECTORS CAPABLE OF PERSISTENT EXPRESSION OF THERAPEUTIC GENES

14. ***Benoit Chapellier*** *(National Center for Geriatrics and Gerontology)*

CELL-TYPE RESTRICTED GENE DELIVERY USING POLYOMAVIRAL VECTORS

15. ***Shigeru Kawakami*** *(Graduate School of Pharmaceutical Sciences, Kyoto University)*

GLYCOSYLATED LIPOSOMES FOR THE TARGETED DELIVERY OF siRNA AND CpG DNA

Plenary Session IV
(Abstracts 16~20)
Congenital Disease

Date: June 14, 2008

8:45-10:00, Main Hall

Chairpersons: Hiroyuki Nunoi, Toya Ohashi

16. ***Hideki Hanawa (****Nippon Medical School****)***

DIRECT COMPARISON OF GAMMA-RETROVIRAL VECTOR AND LENTIVIRAL VECTOR IN STEM CELL GENE THERAPY OF X-SCID MODEL MICE

17. ***Makoto Inoue (****DNAVEC Corporation****)***

RENAL MEDULLA TARGETED AQUAPORIN2 EXPRESSION BY SENDAI-VIRUS VECTOR RESCUED POLYUREA IN RAT NEPHROGENIC DIABETES INSIPIDUS MODEL

18. ***Sandra Obikawa Kyosen (****Jikei University School of Medicine****)***

LENTIVIRUS MEDIATED GENE THERAPY FOR POMPE DISEASE

19. ***Yuko Nitahara-Kasahara (****National Institute of Neuroscience, NCNP)*

MYOGENIC DIFFERENTIATION OF MULTIPOTENT MESENCYMAL STROMAL CELL AND CELL THERAPEUTIC APPROACH TO DUCHENNE MUSCULAR DYSTROPHY

20. ***Katsuto Tamai*** *(Osaka University Graduate School of Medicine)*

NOVEL STRATEGY TO COLLECT BONE MARROW-DERIVED MULTI-LINEAGE PROGENITOR CELLS AS A POTENTIAL TARGET OF GENE AND CELL THERAPY FOR NON-HEMATOPOIETIC GENETIC DISEASES

Day 1: June 12, 2008

Oral Presentation 1 (Abstracts 21~25)

Auditorium

14:00-14:50

CANCER-1

Chairpersons: Yoshinobu Manome, Masatoshi Tagawa

21. THE POTENTIAL OF VSV VIROTHERAPY FOR UNRESECTABLE METASTASES FROM COLORECTAL CANCER IN IMMUNE-COMPETENT RAT

Yamaki M., Shinozaki K., Woo S. L. C., Asahara T.

22. DEVELOPMENT OF CHEMO-VIROTHERAPY USING HERPES SIMPLEX VIRUS TYPE-1 FOR GASTRIC CANCER

Tsuji T., Nakamori M., Ueda K., Tsujimura H., Iwahashi M., Ino Y., Todo T., Yamaue H.

23. INTERFERON-LAMBDAS INHIBIT PROLIFERATION OF HUMAN TUMOR CELLS AND ENHANCE THE SENSITIVITY TO CHEMOTHERAPY

Tagawa M., Li Q., Kawamura K., Ma G., Iwata F., Numazaki M., Suzuki N., Shimada H.

24. SUCCESSFUL TREATMENT OF HCC SIZED 10MM BY COINFECTION OF REPLICATION COMPETENT AdV AND AdVp53 WITH AFPpromoters, AND LOW DOSE 5-FU IN COMBINATION

Sagawa T., Yamada Y., Takahashi M., Sato Y., Kobune M., Takimoto R., Fukaura J., Iyama S., Sato T., Matsunaga T., Kato J., Sasaki K., Hamada H., Niitsu Y.

25. SELECTIVE GENE DELIVERY TO HEPATO-BILIARY CANCERS USING Z33 FIBER MODIFIED ADENOVIRUS VECTOR AND TUMOR SPECIFIC ANTIBODIES

Kawashima R., Abei M., Fukuda K., Nakamura K., Wakayama M., Murata T., Hyodo I., Hamada H., Yokoyama K. K.

Oral Presentation 2 (Abstracts 26~31)

Main Hall

17:00-18:00

CANCER-2

Chairpersons: Kazunori Kato, Teruhiko Yoshida

26. ALLOGENIC MAJOR HISTOCOMPATIBILITY COMPLEX GENE TRANSFER ENHANCES EFFECTIVE ANTITUMOR IMMUNITY IN THE EARLY PERIOD OF AUTOLOGOUS HEMATOPOIETIC STEM CELL TRANSPLANTATION

Narumi K., Kobayashi A., Hara H., Yoshida K., Kondoh A., Yoshida T., Aoki K.

27. DUAL SPECIFICITY OF αβ–γδ TCR T CELLS: TRANSFORMATION OF Vγ9Vδ2 T CELLS WITH MAGE-A4$_{143-151}$-SPECIFIC αβ TYPE TCR GENES

Hiasa A., Nishikawa H., Hirayama M., Okamoto S., Chono H., Yu S. S., Mineno J., Tanaka Y., Minato N., Kato I., Shiku H.

28. GENETIC/FUNCTIONAL STABILITY OF T CELLS TRANSDUCED WITH MAGE-A4-SPECIFIC α β TYPE TCR GENES

Hirayama M., Hiasa A., Nishikawa H., Shirakura Y., Ikeda H., Kitano S., Nukaya I., Yu S. S., Mineno J., Kato I., Shiku H.

29. ANTI-TUMOR IN VIVO EFFICACY OF T CELLS TRANSDUCED WITH MAGE-A4-SPECIFIC αβ TYPE TCR GENES

Ikeda H., Shirakura Y., Hirayama M., Hiasa A., Nishikawa H., Kitano S., Tajima K., Nukaya I., Yu S. S., Mineno J., Ito M., Kato I., Shiku H.

30. CYTOKINE-BASED LOG-SCALE EXPANSION OF FUNCTIONAL MURINE DENDRITIC CELLS

Harada Y., Ueda Y., Sugimoto T., Kinoh H., Komaru A., Inoue M., Hasegawa M., Seki N., Ichikawa T., Yonemitsu Y.

31. TITLE: ENHANCED ANTITUMOR IMMUNITY BY ADOPTIVELY TRANSFUSED SENDAI VIRUS MEDIATED GM-CSF TRANSDUSED DENDRITIC CELLS S IN LLC BEARING MICE

Inoue H., Iga M., Nabeta H., Xin M., Kurita R., Takayama K., Inoue M., Hasegawa M., Nakanishi Y., Tani K.

Oral Presentation 3 (Abstracts 32~37)

Auditorium

17:00-18:00

ACQUIRED DISEASE

Chairpersons: Katsuto Tamai, Yoshikazu Yonemitsu

32. AAV VECTOR-MEDIATED SYSTEMIC INTERLEUKIN-10 EXPRESSION AMELIORATES THE METABOLIC SYNDROME IN ZUCKER FATTY RATS

Ito T., Nakata M., Uchibori R., Urabe M., Mizukami H., Kume A., Yada T., Shimada K., Ozawa K.

33. EFFICIENT CTL INDUCTION AGAINST AIDS THROUGH THE SENDAI VIRUS VECTOR-MEDIATED EXPRESSION OF GAG PROTEIN EVEN IN THE PRESENCE OF ANTI-VECTOR ANTIBODY

Inoue M., Moriya C., Iida A., Shu T., Hasegawa M., Matano T.

34. DECOY DELIVERY INTO LIVER USING DENDRITIC POLY(L-LYSINE)

Niidome T., Sugao Y., Watanabe K., Mori T., Katayama Y.

35. ELIMINATION OF HCV FROM HUMAN HEPATOCYTES BY INDUCTION OF TYPE I IFN VIA EXPRESSION OF IRF7

Wen X., Abe T., Moriishi K., Matsuura Y.

36. UTILIZATION OF CASPASE14 PROMOTER FOR SELECTIVE TRANSGENE EXPRESSION IN SQUAMOUS LAYERS OF CHOLESTEATOMA IN THE MIDDLE EAR.

Suzuki R., Watanabe M., Kojima H., Moriyama H., Manome Y.

37. ANALYSIS OF *DE NOVO* ENGINEERERD VARIANTS OF AG-30 FOR THE TREATMENT OF ISCHEMIC DISEASES AND INFECTIOUS DISEASES.

Nishikawa T., Nakagami H., Morishita R., Maeda A., Tamai K., Tomono K., Kaneda Y.

Day 2: June 13, 2008

Oral Presentation 4 (Abstracts 38~40)

Main Hall

10:15-10:45

STEM CELL-1

Chairperson: Masafumi Onodera

38. MICRORNA TRANSFERRED TO HUMAN ADIPOSE TISSUE-DERIVED STEM CELLS BY LENTIVIRUS VECTOR ENHANCED ADIPOGENESIS THROUGH DOWNREGULATION OF HOMEOBOX C8.

Mori M., Nakagami H., Hayashi H., Koriyama H., Takami Y., Tamai K., Kaneda Y.

39. ENHANCED ENGRAFTMENT OF HUMAN HEMATOPOIETIC STEM CELLS INFECTED WITH INTEGRATION DEFECTIVE LENTIVIRUS VECTOR ENCODING WHIM-TYPE MUTANT CXCR4 IN NOD/SCID MOUSE XENOGRAFT MODEL

Kawai T., Choi U., Lantz L. M., Ohashi T., Eto Y., Malech H. L.

40. A NEW RED FLUORESCENT PROTEIN THAT ALLOWS EFFICIENT MARKING OF MURINE MELATOPOIETIC AND EMBRYONIC CELLS

Hamanaka S., Sanuki S., Otsu M., Onodera M.

Oral Presentation 5 (Abstracts 41~45)

Main Hall

15:00-15:50

CANCER-3

Chairpersons: Yoshikazu Sugimoto, Tomoki Todo

41. CD10 TARGETED SELECTIVE GENE THERAPY FOR B CELL LYMPHOMA THROUGH FZ33 FIBER MODIFIED ADENOVIRAL VECTORS

Takahashi S., Kato K., Nakamura K., Masuta Y., Tomihara K., Nakano R., Kubota K., Hamada H.

42. DEVELOPMENT OF ADENO-ASSOCIATED VIRAL (AAV) VECTOR MEDIATED ANTI-ANGIOGENIC SYSTEMIC CANCER GENE THERAPY

Miyake K., Wang Y., Chen X., Miyake N., Shimada T.

43. INHIBITION OF TUMOR GROWTH OF MALIGNANT PLEURAL MESOTHELIOMA BY SINGLE INTRAMUSCULAR INJECTION OF AAV TYPE-8 VECTOR EXPRESSING MDA-7/IL24

Minegishi Y., Miyake K., Gemma A., Shimada T.

44. ONCOLYTIC HSV THERAPY SENSITIZES GLIOMA CELLS TO INTEGRIN ANTAGONISTS *IN VITRO* AND *IN VIVO*.

Kurozumi K., Kutsikovich J., Alvarez-Breckenridge C., Chiocca E. A., Kaur B.

45. IMMUNE RESPONSES AFTER INTRAVENOUS TREATMENT WITH ONCOLYTIC HSV-1 IN MICE HARBORING METASTATIC RENAL CELL CARCINOMA

Tsurumaki Y., Fukuhara H., Ino Y., Kitamura T., Todo T.

Oral Presentation 6 (Abstracts 46~50)

Main Hall

15:50-16:40

GENE DELIVERY SYSTEM -1

Chairpersons: Mamoru Hasegawa, Hiroyuki Mizuguchi

46. REDUCTION OF VECTOR-INDUCED INNATE IMMUNITY BY SOCS1-EXPRESSING ADENOVIRUS VECTOR

Kawabata K., Sakurai H., Tashiro K., Yamaguchi T., Sakurai F., Nakagawa S., Mizuguchi H.

47. POLYPLEX MICELLES FROM PLASMID DNA AND PEG-BASED BLOCK COPOLYMER WITH ENVIRONMENTAL-RESPONSIVE CROSSLINKS AND TARGETABLE LIGANDS

Oba M., Aoyagi K., Miyata K., Itaka K., Nishiyama N., Koyama H., Kataoka K.

48. OCTAARGININE-MODIFIED MULTIFUNCTIONAL ENVELOPE-TYPE NANOPARTICLES FOR GENE DELIVERY

Khalil I. A., Kogure K., Yamada M., Harashima H.

49. DEPOSITION TRANSFECTION TECHNOLOGY BASED ON STAR VECTOR: MATERIAL DESIGN AND ITS OPTIMIZATION

Nakayama Y., Ishikawa A., Zhou Y-M., Nemoto Y., Nakayama M.

50. ENHANCHMENT OF GENE TRANSFER EFFICIENCY BY CROSSLINKING OF STAR VECTOR

Nakayama Y., Borovkov A., Zhou Y-M., Nemoto Y., Uchida K.

Oral Presentation 7 (Abstracts 51~56)

Main Hall

16:40-17:40

CANCER-4

Chairpersons: Akinobu Gotoh, Masato Yamamoto

51. BLOCKING OF THE LTB4 SIGNALING MAINTAINS THE IN VIVO ANTITUMOR EFFECTS OF GM-CSF TRANSDUCED TUMOR CELLS

Nabeta H., Inoue H., Iga M., Xin M., Kurita R., Sasaki F., Takayama K., Nakanishi Y., Yokomizo T., Tani K.

52. DENDRITIC CELLS GENETICALLY MODIFIED TO EXPRESS THE MELANOMA ANTIGEN, gp100 PRIMED THE TUMOR-SPECIFIC Th1 LYMPHOCYTES EFFICIENTLY, RESULTING IN ERADICATION OF THE MELANOMA CELL LINE B16 IN VIVO.

Fujisawa Y., Nabekura T., Otsuka F., Onodera M.

53. DENDRITIC CELL-BASED IMMUNOTHERAPY USING SENDAI VIRUS VECTOR - A PRECLINICAL EFFICACY STUDY AGAINST NEUROBLASTOMA -

Tanaka S., Tatsuta K., Tajiri T., Yonemitsu Y., Ueda Y., Hasegawa M., Suita S., Taguchi T.

54. COMBINATION THERAPY USING ALLOREACTIVE T LYMPHOCYTES AS PRODUCER CELLS FOR REPLICATION-COMPETENT RETROVIRUS VECTORS IN A HUMAN GLIOMA XENOGRAFT MODEL

Haga K., Gomez G. G., Logg C. L., Kimura T., Hiraoka K., Matsumoto H., Ohno I., Lin A., Kruse C. A., Kasahara N.

55. NEURAL STEM CELLS TRANSDUCED WITH THE IFN-β AND CYTOSINE DEAMINASE GENES ENHANCE BYSTANDER EFFECT IN EXPERIMENTAL GLIOMAS

Ito S., Natsume A., Shimato S., Ohno M., Kato T., Kim S. U., Wakabayashi T.

56. TARGETING OF GLIOMA CELLS EXPRESSING THE EGFR TYPE 3 VARIANT USING T-CELLS WITH TUMOR-SPECIFIC CHMERIC T-CELL RECEPTORS

Ohno M., Natsume A., Yoshikawa K., Shimato S., Wakabayashi T.

Oral Presentation 8 (Abstracts 57~62)

Auditorium

16:40-17:40

NEURO-MUSCULAR DISEASE

Chairpersons: Hideki Mochizuki, Takashi Okada

57. PARKIN GENE THERAPY IN A MOUSE MODEL OF PARKINSON'S DISEASE

Yasuda T., Nihira T., Hayakawa H., Ren Y-R., Hattori N., Mizuno Y., Mochizuki H.

58. BLOCKING OF LINGO-1 ACTIVITY USING LINGO-1-Fc DECOY PROTEIN ENHANCES SURVIVALS OF DOPAMINERGIC NEURONS IN PARKINSON'S DEISEASE MODELS

Inoue H., Takahashi R., Lin L., Mi S., Isacson O.

59. ADVANCES IN PARKIN GENE THERAPY –A FOLLOW UP PRIMATE STUDY–

Mochizuki H., Yasuda T., Nihira T., Inoue K., Yamazaki Y., Terao K., Takada M., Shimada T., Mizuno Y.

60. IN VIVO DELIVERY OF ADENO-ASSOCIATED VIRUS WAS SUCCESSFULLY AND NONINVASIVELY TRANSFERRED INTO THE SUPPORTING CELLS OF THE NEONATAL MOUSE COCHLEA

Iizuka T., Mochizuki H., Kanzaki S., Inoshita A., Narui Y., Furukawa M., Ogawa K., Ikeda K.

61. IMPROVEMENT OF CARDIAC CONDUCTION ABNORMALITIES BY rAAV9-MEDIATED *microdystrophin* TRANSDUCTION IN *mdx* MICE

Shin J-H., Ohshima S., Kasahara Y., Okada T., Takeda S.

62. LENTIVIRAL MEDIATED GENE THERAPIES FOR DUCHENNE MUSCULAR DYSTROPHY MODEL

Uchino K., Kimura E., Suga T., Koide T., Maeda Y., Li S., Chamberlain J., Uchino M.

Day 3: June 14, 2008

Oral Presentation 9 (Abstracts 63-67)

Auditorium

9:00-9:50

GENE DELIVERY SYSTEM-2

Chairpersons: Koichi Miyake, Mahito Nakanishi

63. IMPROVEMENT OF TRANSDUCTION EFFICIENCY OF RCR VECTOR BY COMPLEXATION OF POLYBRENE AND CHONDROITIN SULFATE C

Kimura T., Hiraoka K., Haga K., Kiyota H., Ohashi T., Eto Y., Egawa S., Kasahara N.

64. rAAV8-MEDIATED PROTEIN ANCHORING THERAPY FOR CONGENITAL DEFECT OF COLLAGEN Q

Ito M., Suzuki Y., Okada T., Takeda S., Fukudome T., Yoshimura T., Krejci E., Ohno K.

65. INHIBITORY ACTIONS OF VERY LOW TITER NEUTRALIZING ANTIBODY AGAINST AAV8 CAPSID UPON LIVER-MEDIATED FACTOR IX EXPRESSION IN NON-HUMAN PRIMATES

Mizukami H., Mimuro J., Ishiwata A., Ono F., Yagi H., Urabe M., Kume A., Terao K., Yasutomi Y., Sakata Y., Ozawa K.

66. COMPARATIVE EVALUATION OF OCTAARGININE AND OCTALYSINE MODIFIED NANOPARTICLES FOR INTRACELLULAR DELIVERY OF PLASMID DNA AND siRNA

El-Sayed A., Khalil I. A., Kogure K., Harashima H.

67. GENE TRANSFECTION TO HUMAN RETINAL PIGMENT EPITHERIAL CELLS USING MAGNETITE CATIONIC LIPOSOME

Kachi S., Fujii Y., Kaneko H., Kawasumi T., Honda H., Terasaki H.

Oral Presentation 10 (Abstracts 68~73)

Main Hall

14:00-15:00

CONGENITAL DISEASE

Chairpersons: Makoto Otsu, Atsushi Watanabe

68. KALLISTATIN GENE THERAPY ATTENUATES OSTEOARTHRITIS DEVELOPMENT IN THE ANTERIOR CRUCIATE LIGAMENT-TRANSECTED KNEE OF RAT

Hsieh J., Wu C-L., Shiau A-L.

69. A NOVEL STRATEGY OF HEMATOPOIETIC STEM CELL TRANSPLANTATION FOR SEVERE COMBINED IMMUNODEFICIENCY DISEASES

Suzuki S., Otsu M., Nakauchi H.

70. FULL RECONSTITUTION OF IN VIVO OXIDATIVE ACTIVITY FOR PHENYLALANINE IN SELF-COMPLEMENTARY AAV VECTOR-TREATED PHENYLKETONURIA MICE

Kume A., Yagi H., Mizukami H., Urabe M., Ito T., Ozawa K.

71. DEVELOPMENT OF EFFECTIVE STRATEGY USING BY ANTI-CD40L MAB CONTANING MINIMUM INTENSITY REGIMEN WITH FAIL-SAFE SUICIDE SYSTEM

Takeuchi Y., Otsu M., Kume A., Onodera M., Kuratsuji T., Nakauchi H.

72. INDUCTION OF IMMUNOTOLERANCE AND SUSTAINED EXPRESSION OF ASA BY SINGLE INTRAVENOUS INJECTION OF AAV VECTOR IN NEONATAL MLD MICE

Miyake N., Miyake K., Atsumi M., Shimada T.

73. TRANSDUCTION EFFICIENCY AND IMMUNE RESPONSE WITH rAAV8 IN DOG SKELETAL MUSCLE

Ohshima S., Shin J-H., Nishiyama A., Yuasa K., Kasahara Y., Okada T., Takeda S.

Oral Presentation 11 (Abstracts 74~78)

Main Hall

15:00-15:50

CANCER-5

Chairpersons: Junji Kato, Yasutomo Nasu

74. ESTABLISHMENT OF A LYMPH NODE METASTASIS MODEL WITH ENDOMETRIAL CANCER AND THERAPEUTIC EFFICACY OF AAV VECTORS ENCODING *sflt-4*

Takahashi K., Mizukami H., Saga Y., Takei Y., Urabe M., Kume A., Suzuki M., Ozawa K.

75. RADIOSENSITIZATION BY A NOVEL p16 FUNCTIONING PEPTIDE THERAPY IN PROSTATE CANCER

Anai S., Tanaka M., De Velasco M., Saito K., Tomioka A., Yoshikawa K., Shimazhui T., Kondo E., Hirao Y., Uemura H.

76. REIC/Dkk-3 STABLE TRANSFECTANT INDICATES ANTI-TUMOR PHENOTYPE IN MOUSE PROSTATE CANCER RM9 CELLS

Kaku H., Chen J., Watanabe M., Huang P., Kashiwakura Y., Abarzua F., Saika T., Nasu Y., Kumon H.

77. DELIVERY OF PTEN VIA A NOVEL GENE MICROCAPSULE SENSITIZES PROSTATE CANCER CELLS TO IRRADIATION

DeVelasco M., Tanaka M., Tomioka A., Anai S., Uemura H.

78. A NOVEL PTEN FUNCTIONAL PEPTIDE THERAPY FOR PROSTATE CANCER.

Tanaka M., Anai S., DeVelasco M., Saito K., Tomioka A., Yoshikawa K., Uemura H.

Oral Presentation 12 (Abstracts 79~82)

Auditorium

15:00-15:40

STEM CELL-2

Chairpersons: Akihiro Kume, Makoto Migita

79. THE FUNCTION OF A NOVEL IRQ LIGAND-MODIFIED CARRIER FOR AN EFFICIENT CYTOSOLIC DELIVERY OF siRNA

Mudhakir D., Akita H., Tan E., Harashima H.

80. OPTIMAZATION OF ENVELOPE AND PROMOTER FOR LINTIVIRAL GENE TRANSFER INTO HUMAN EMBRYONIC STEM CELLS

Aizawa E., Mitsui K., Suzuki K., Suemori H., Nakatsuji N., Mitani K.

81. HOMOLOGOUS RECOMBINATION IN CYNOMOLGUS MONKEY EMBRYONIC STEM CELLS WITH AN INTEGRASE-DEFECTIVE LENTIVIRAL VECTOR

Aizawa E., Mitsui K., Suzuki K., Suemori H., Nakatsuji N., Mitani K.

82. HIGHLY EFFICIENT GENE TRANSFER AND GENETIC MANIPULATION IN HUMAN EMBRYONIC STEM CELLS USING VIRAL VECTORS

Mitani K., Suzuki K., Aizawa E., Mitsui K., Haruka S., Hasegawa K., Kawase E., Suemori H., Nakatsuji N.

Poster Session (Abstracts 83~99)

Auditorium

18:00-19:30

83. PEG-MODIFIED ADENOVIRUS WITH RETARGETING MOTIF ENHANCES TRANSGENE DELIVERY IN BREAST CANCER CELLS

Kim P-H., Jung Y., Park H-J., Lee J., Hyung W., Yang J., Ko H., Sohn J-H., Huh Y-M., Kim J-H., Haam S., Yun C-O.

84. CONBINATION OF ONCOLYTIC ADENOVIRUS WITH TAXOL ELICITS MARKEDLY ENHANCEMENT OF ANTITUMOR EFFICACY BY ACTIVE INDUCTION OF APOPTOSIS AND AUGMENT OF VIRAL PRODUCTION.

Yoon A-R., Yun C-O., Kim J-H.

85. ENHANCED T CELL-MEDIATED ANTITUMOR EFFICACY OF ONCOLYTIC ADENOVIRUS EXPRESSING CYTOKINE

Choi K-J., Kim J., Yun C-O.

86. COMPARISON OF DENDRITIC CELLS DELIVERED WITH TUMOR ANTIGENS USING ADENOVIRAL VECTOR AND TUMOR LYSATES

Jeong J-G., Lee H-J., Ahn H-S., Oh S-M., Ho S-H., Cho H., Kang S., Choi S-M, Kim J-M., Kim S., Kim S.

87. IL-8-SPECIFIC SHORT HAIRPIN RNA-EXPRESSING ONCOLYTIC ADENOVIRUS ELICITS POTENT INHIBITION OF ANGIOGENESIS AND TUMOR GROWTH

Yoo J. Y., Kim J-H., Kim J., Huang J-H., Zhang S-N., Kang Y-A., Kim H., Yun C-O.

88. VEGF-TARGETED ARTIFICIAL ZINC FINGER PROTEIN-EXPRESSING ADENOVIRUS DOWNREGULATES ANGIOGENESIS AND LEADS TO ENHANCED ANTI-TUMOR EFFECTS

Kang Y-A., Shin H-C., Yoo J. Y., Kim J-H., Kim J-S., Yun C-O.

89. RECOMBINANT ADENOVIRUS EXPRESSING Tat-anti-HDM2 ENHANCES ANTITUMOR EFFECT WITH APOPTOSIS INDUCED BY p53 ACTIVATION

Kim M-J., Yoo J. Y., Shin H. W., Kim J-H., Yun C-O.

90. E1A- AND E1B-DOUBLE MUTANT REPLICATING ADENOVIRUS ELICITS ENHANCED ONCOLYTIC AND ANTITUMOR EFFECTS

Kim J., Choi K-J., Kim P-H., Yun C-O., Kim J-H.

91. MAKING RETROVIRAL GENE THERAPY SAFER: PREVENTION OF RETROVIRUS-MEDIATED ACTIVATION OF CELLULAR GENES NEAR THE INTEGRATION SITE BY ENGINEERING OF THE LTR

Hong Y., Yoon N-K., Kim S., Jang J., Kim S.

92. A MOUSE IMMUNOCOMPETENT MODEL FOR METASTATIC MAMMARY CANCER ACCESSIBLE TO BIOLUMINESECENCE IMAGING

Shibata M., Morimoto J., Otsuki Y.

93. NAKED DNA EXPRESSING TWO ISOFORMS OF HEPATOCYTE GROWTH FACTOR INDUCES COLLATERAL ARTERY AUGMENTATION IN A RABBIT MODEL OF LIMB ISCHEMIA

Pyun W-B., Hahn W., Kim D-S., Yoo W-S., Lee S-D, Kim S., Kim S., Kim J-M.

94. LONG-TERM ATTENUATION OF NEUROPATHIC PAIN SYMPTOM BY ADMINISTERING A RECOMBINANTADENO-ASSOCIATED VIRUS ENCODING GAD65

Kim S. J., Kim J., Lee W. I., Shin O. K., Song I. H., Lee T. S., Cheon G-J., Kim S. W., Chang J.W., Lee H.

95. OPTIMIZATION OF FACTORS AFFECTING GENE DELIVERY EFFICIENCY OF RETROVIRAL VECTOR IN GAS-PERMEABLE BAG SYSTEM

Joo C-W., Hong Y., Ho S-H., Jang J., Kang H. J., Kim J. G., Kim S., Kim S.

96. TRANSDUCTION OF siRNA AGAINST ROCK1 AND ROCK2 CAUSES DIFFERENT EFFECTS ON GLOMERULAR MESANGIAL CELLS IN DIABETIC CONDITION MODEL.

Ishizawa S., Utsunomiya K., Yokota T., Taniguchi K., Gojo A., Kurata H., Tajima N., Watanabe M., Manome Y.

97. CAPSID: AN EFFICIENT TOOL FOR DESIGN OF siRNA FUNCTIONING TO HIGHLY VARIABLE TARGETS

Lee H. S., Ahn J., Jun E. J., Yang S., Joo C. H., Kim Y. K., Lee H.

98. DEVELOPMENT OF CARDIAC ANKYRIN REPEAT PRTOEIN-BASED ARTERIOGENIC GENE THERAPY IN A MURINE MODEL OF HINDLIMB ISCHEMIA

Kong H. Y., Yoo H., Lee A. R., Lee S., Byun J.

99. IMMUNOGENICITY AND SAFETY PROFILES OF GENETIC VACCINES AGAINST HUMAN Her-2/*neu* IN CYNOMOLGUS MONKEYS

Ko H-J., Kim Y-J., Kim Y-S., Kim J-M., Ho S-H., Jeong J-G., Oh S-M., Chae J-A., Kim C-Y., Lee P. S., Kang C-Y.