

THE 12th ANNUAL MEETING

2006

JAPAN SOCIETY OF GENE THERAPY

PROGRAM AND ABSTRACTS

Date

August 24-26, 2006

Venue

Nippon Medical School, KITSUOU Building

1-1-5, Sendagi, Bunkyo-ku,
Tokyo

JSGT Home-pageURL: <http://jsgt.jp>

Presidential Lecture

Date: August 25, 2006

10:30-11:30, Hall A (2F)

Chairperson: Takashi Shimada

Arthur W. Nienhuis (St. Jude Children's Research Hospital)

DEVELOPMENT OF GENE THERAPY FOR BLOOD DISEASES

Educational Lecture

(Japanese)

Date: August 24, 2006

15:10-16:10, Hall A (2F)

Chairperson: Jun Yoshida

Kazunori Kataoka (The University of Tokyo)

**SMART POLYMERIC MICELLES AS NANOCARRIERS FOR GENE AND NUCLEIC ACID
DELIVERY**

Invited Lectures

Invited Lecture I

Date: August 25, 2006
12:50-13:20, Hall A (2F)
Chairperson: Shuji Tsuji

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

**SINGLE TREATMENT, PHASE 1B PLACEBO CONTROLLED TRIAL OF A ZINC FINGER
DNA-BINDING PROTEIN (ZFP) ACTIVATOR (SB-509) OF VASCULAR ENDOTHELIAL
GROWTH FACTOR (VEGF) IN SUBJECTS WITH DIABETIC NEUROPATHY (DN)**

Invited Lecture II

Date: August 26, 2006
10:00-10:40, Hall A (2F)
Chairperson: Torayuki Okuyama

Mark S. Sands (*Washington University School of Medicine*)

GENE THERAPY FOR MUCOPOLYSACCHARIDOSIS VII: FROM BENCH TO BEDSIDE

International Symposium I

Clinical Cancer Gene Therapy

Date: August 24, 2006

14:00-15:00, Hall A (2F)

Chairperson: Hideaki Tahara

Shirley M. Clift (Cell Genesys, Inc.)

CLINICAL DEVELOPMENT OF A GVAX® PROSTATE CANCER IMMUNOTHERAPY PROGRAM

Peter K. Working (Cell Genesys, Inc.)

PRECLINICAL AND CLINICAL PROGRESS USING ONCOLYTIC ADENOVIRUSES

International Symposium II

Bioventure in Asia

Date: August 26, 2006

12:55-14:15, Hall A (2F)

Chairpersons: Yasufumi Kaneda, Sunyoung Kim

Ryuichi Morishita (Graduate School of Medicine, Osaka University)

DEVELOPMENT OF VASCULAR REGENERATION DNA DRUG "HGF"

Sunyoung Kim (Seoul National University and ViroMed Co. Ltd.)

CONVERTING GENES TO VIABLE DRUGS: THE VIROMED CO. LTD. R & D STRATEGY

Zhaohui Peng (SiBiono GeneTech Co., Ltd.)

SIBIONO GENETECH & GENDICINE®

Mamoru Hasegawa (DNAVEC Corp.)

A BUSINESS STRATEGY BASED ON NOVEL VECTOR PLATFORM TECHNOLOGY

Symposium I

Stem Cell

Date: August 25, 2006

9:00-10:20, Hall A (2F)

Chairpersons: Hiromitsu Nakauchi, Keiya Ozawa

SI-1. HEMATOPOIETIC STEM CELL (HSC) GENE THERAPY FOR TWO PATIENTS WITH ADENOSINE DEAMINASE (ADA) DEFICIENCY WITHOUT MYELOPREPARATIVE CONDITIONING; A SUGGESTION FOR THE OPTIMAL PROTOCOL OF HSC GENE THERAPY FOR ADA

Tadashi Ariga (Hokkaido University Graduate School of Medicine)

SI-2. SAFETY ISSUES OF STEM CELL GENE THERAPY

-RELATIONSHIP BETWEEN INTEGRATION SITES AND LEUKEMOGENESIS

Masafumi Onodera (Graduate School of Comprehensive Human Sciences, University of Tsukuba)

SI-3. HEMATOPOIETIC STEM CELLS AS TARGET CELLS OF GENE THERAPY

Hiromitsu Nakauchi (The Institute of Medical Science, The University of Tokyo)

SI-4. MESENCHYMAL STEM CELLS AND THEIR APPLICATIONS TO GENE THERAPY

Keiya Ozawa (Jichi Medical University)

Symposium II

Lysosomal Storage Disorders

Date: August 26, 2006

9:00-10:00, Hall A (2F)

Chairpersons: Makoto Migita, Toya Ohashi

SII-1. GENE THERAPY/ CELL THERAPY IN LYSOSOMAL STORAGE DISEASE

Yoshikatsu Eto (The Jikei University School of Medicine)

SII-2. CORRECTION OF METACHROMATIC LEUKODYSTROPHY IN A MOUSE MODEL BY AAV1 MEDIATED CO-EXPRESSION OF ASA AND FGE

Toshiyuki Kurai (Nippon Medical School)

SII-3. GENE AND CELL THERAPY FOR MUCOPOLYSACCHARIDOSIS VII

Torayuki Okuyama (National Center for Child Health and Development)

SII-4. EX VIVO AND IN VIVO GENE THERAPIES FOR LYSOSOMAL STORAGE DISEASES

Toya Ohashi (The Jikei University School of Medicine)

Technical Seminars

(Japanese)

Technical Seminar I

Date: August 25, 2006

14:50-16:20, Hall B (3F)

Chairpersons: Tadahito Kanda, Kenzaburo Tani

WRITING CLINICAL PROTOCOLS

Tadahito Kanda (National Institute of Infectious Diseases)

Toshiyoshi Fujiwara (Okayama University Graduate School of Medicine and Dentistry)

Kenzaburo Tani (Medical Institute of Bioregulation, Kyusyu University)

Yoshikazu Sugimoto (Kyoritsu University of Pharmacy)

Motokuni Aoki (Graduate School of Medicine, Osaka University)

Technical Seminar II

Date: August 25, 2006

16:30-18:00, Hall B (3F)

Chairpersons: Hiroyuki Mizuguchi, Izumu Saito

ADENOVIRUS VECTOR PREPARATION

Hiroyuki Mizuguchi (National Institute of Biomedical Innovation)

Izumu Saito (The Institute of Medical Science, The University of Tokyo)

Technical Seminar III

Date: August 26, 2006

15:50-17:20, Hall B (3F)

Chairpersons: Yukihiko Hirai, Hiroaki Mizukami

ADENO-ASSOCIATED VIRUS VECTOR PREPARATION

Hiroaki Mizukami (Jichi Medical University)

Yukihiko Hirai (Nippon Medical School)

Takashi Okada (Jichi Medical University)

Masashi Urabe (Jichi Medical University)

Hiroyuki Nakai (University of Pittsburgh)

Plenary Session I (Abstracts 1-4)

Clinical

Date: August 24, 2006

13:00-14:00, Hall A (2F)

Chairperson: Shigetaka Asano

1. STEADY ONGOING HEMATOLOGICAL AND IMMUNOLOGICAL RECONSTITUTION ACHIEVED IN ADA-DEFICIENCY PATIENTS TREATED BY STEM CELL GENE THERAPY WITH NO MYELOPREPARATIVE CONDITIONING

Otsu M., Nakajima S., Kida M., Maeyama Y., Toita N., Hatano N., Kawamura N., Kobayashi R., Tatsuzawa O., Onodera M., Kobayashi E., Sagawa H., Kato I., Candotti F., Bali P., Hershfield M. S., Sakiyama Y., Ariga T.

2. GENE THERAPY CLINICAL TRIALS FOR RELAPSED LEUKEMIA WITH INFUSIONS OF THE SUICIDE-GENE TRANSDUCED DONOR LYMPHOCYTES IN JAPAN

Onodera M., Kaneko S., Otsu M., Okoshi Y., Kojima H., Shimizu T., Fukushima T., Sumazaki R., Bonini C., Bordignon C., Nakauchi H., Nagasawa T.

3. A CLINICAL TRIAL OF CATIONIC LIPOSOMES CONTAINING INTERFERON-BETA GENE FOR PATIENTS WITH MALIGNANT GLIOMA --AUTOPSY AND GENE EXPRESSION PROFILING--

Wakabayashi T., Mizuno M., Natsume A., Fujii M., Kajita Y., Nakahara N., Yoshida J.

4. PHASE I/II STUDY OF ADENOVIRAL VECTOR DELIVERY OF HSV-TK GENE AND THE INTRAVENOUS ADMINISTRATION OF GANCICLOVIR IN MEN WITH LOCAL RECURRENCE OF PROSTATE CANCER AFTER HORMONAL THERAPY

Nasu Y., Kaku H., Ebara S., Saika T., Thompson T. C., Kumon H.

Plenary Session II (Abstracts 5-8)

Pre-Clinical

Date: August 26, 2006

10:45-11:45, Hall A (2F)

Chairperson: Yoshikatsu Eto

5. DEVELOPMENT OF HIGH THROUGHPUT FUNCTIONAL SCREENING OF CARDIOVASCULAR THERAPEUTIC GENES USING THE HVJ-E VECTOR: ANALYSIS OF A NOVEL ANGIOGENIC PEPTIDE, AG-30

Nishikawa T., Nakagami H., Tamai K., Kaneda Y.

6. PERSISTENT GENE EXPRESSION OVER THE LIFE-TIME OF AIRWAY EPITHELIAL CELLS TRANSDUCED BY LENTIVIRAL VECTOR PSEUDOTYPED WITH ENVELOPE PROTEINS F AND HN FROM SENDAI VIRUS

Mitomo K., Griesenbach U., Inoue M., Tabata T., Geddes D. M., Alton E. W. F. W., Hasegawa M.

7. EFFICIENT REGULATION OF VIRAL REPLICATION BY SYSTEMICALLY ADMINISTERED siRNA IN A NON-HUMAN PRIMATE SURROGATE MODEL FOR HEPATITIS C

Yokota T., Iijima S., Kubodera T., Ishii K., Ageyama N., Yingwei C., Lee J.-J., Maki N., Mizusawa H., Akari H.

8. COMPLETE NORMALIZATION OF HYPERPHENYLALANINEMIA IN FEMALE *Pah^{enu2}* MOUSE BY A SELF-COMPLEMENTARY ADENO-ASSOCIATED VIRUS VECTOR

Kume A., Ogura T., Matsushita T., Mizukami H., Urabe M., Okada T., Ozawa K.

Oral Session I (Abstracts 9-28)
Day I: August 24, 2006

Vector Development I (Genotoxicity & AAV Vector) 16:20-18:00, Hall A(2F)

Chairpersons: Akihiro Kume, Masashi Onodera

9. PREFERENTIAL INTEGRATION OF LINEAR PLASMID DNA INTO GENES: IMPLICATIONS IN A RISK OF INSERTIONAL MUTAGENESIS BY DNA VIRAL VECTORS

Ohbayashi F., Mitani K.

10. AAV8 VECTOR INJECTION AT BIRTH SIGNIFICANTLY AUGMENTS THE PROGRESSION OF LIVER TUMORS IN HBV TRANSGENIC MICE PREDISPOSED TO HEPATOCELLULAR CARCINOMA

Inagaki K., Monga S. P. S., Storm T. A., Fuess S., Kay M. A., Nakai H.

11. IDENTIFICATION OF PROVIRUS INTEGRATION SITES ASSOCIATED WITH MAINTENANCE OF THE TRANSGENE EXPRESSION IN MICE GENERATION FROM RETROVIRALLY TRANSDUCED EMBRYONIC STEM CELLS

Hamanaka S., Otsu M., Nagasawa T., Nakauchi H., Onodera M.

12. ANALYSIS OF B CELL LYMPHOMA DEVELOPING IN TRANSGENIC MICE GENERATED FROM RETROVIRALLY TRANSDUCED EMBRYONIC STEM CELLS

Hirata Y., Hamanaka S., Otsu M., Kawakami Y., Onodera M.

13. APPLICATION OF HSV-TK SUICIDE GENE TO X-SCID GENE THERAPY: GANCICLOVIR TREATMENT SELECTIVELY ELIMINATES GENE CORRECTED CELLS *IN VITRO* AND *IN VIVO*

Uchiyama T., Ishikawa Y., Ishii N., Onodera M., Sato M., Sasahara Y., Tanaka N., Sugamura K., Kumaki S., Tsuchiya S.

14. THE ELONGATION FACTOR 1 α PROMOTER IN SELF-INACTIVATING RETROVIRUSES CAUSES LESS INSERTIONAL GENE ACTIVATION COMPARED TO RETROVIRUS PROMOTER

Hanawa H., Shimada T.

15. CHROMATOGRAPHIC SEPARATION OF TYPE 1 ADENO-ASSOCIATED VIRUS VECTOR FROM EMPTY PARTICLES POTENTIATES ITS TRANSGENE EXPRESSION

Urabe M., Xin K-Q., Obara Y., Nakakura T., Mizukami H., Kume A., Okuda K., Ozawa K.

16. *IN VIVO* AND *EX VIVO* EXPRESSION OF TRANSGENE IN MURINE PANCREATIC ISLETS BY rAAV TYPE 8

Hiki Y., Sasaki T., Fujimoto K., Nemoto M., Nakai N., Ohashi T., Eto Y., Hano H., Hirai Y., Shimada T., Tajima N.

17. EFFICIENT TRANSDUCTION OF OLIGODENDROCYTES BY AAV8 VECTORS

Xiao W-Z., Matsushita T., Nara Y., Takino N., Nishida H., Kodera M., Sasaki Y., Kikuchi S., Okada T., Hoshi M., Nakano I., Ozawa K., Muramatsu S.

18. ADENO-ASSOCIATED VIRUS SEROTYPE 8 (AAV8)-MEDIATED shRNA DELIVERY *IN VIVO*

Chen Y., Yokota T., Kubodera T., Ohnishi I., Li Y., Nishina K., Hirai Y., Shimada T., Mizusawa H.

Cancer I (Cancer Immunotherapy) 16:20-18:00, Hall B(3F)

Chairpersons: Yasutomo Nasu, Masatoshi Tagawa

19. ANTITUMOR EFFICACY OF ONCOLYTIC HERPES SIMPLEX VIRUS EXPRESSING INTERLEUKIN 12 BY INTRAVENOUS DELIVERY

Yi G., Ino Y., Fukuhara H., Todo T.

20. GENETICALLY-ENGINEERED HERPES SIMPLEX VIRUS EXPRESSING IL-12 FOR THE TREATMENT OF EXPERIMENTAL BRAIN TUMORS

Miyamoto S., Ino Y., Fukuhara H., Todo T.

21. DELIVERY OF DENDRITIC CELLS ENGINEERED TO SECRETE IFN-ALPHA INTO CENTRAL NERVOUS SYSTEM TUMORS ENHANCES THE EFFICACY OF PERIPHERAL TUMOR CELL VACCINES: DEPENDENCE ON APOPTOTIC PATHWAYS

Kuwashima N., Nishimura F., Eguchi J., Sato H., Hatano M., Tsugawa T., Sakaida T., Dusak J. E., Fellows-Mayle W. K., Papworth G. D., Watkins S. C., Gambotto A., Pollack I. F., Storkus W. J., Okada H., Yanaga K.

22. INDUCTION OF EFFICIENT ANTITUMOR IMMUNITY TO MURINE NEUROBLASTOMA USING DENDRITIC CELLS HIGHLY ACTIVATED BY TEMPERATURE-SENSITIVE MUTANT SeV/dF: A PRECLINICAL EFFICACY STUDY

Tanaka S., Yonemitsu Y., Tatsuta K., Shibata S., Okano S., Kondo H., Tajiri T., Taguchi T., Ueda Y., Inoue M., Hasegawa M., Sueishi K.

23. FEASIBILITY OF VACCINE THERAPY WITH DENDRITIC CELLS GENETICALLY MODIFIED TO EXPRESS THE TUMOR-ASSOCIATED ANTIGEN HER2

Nabekura T., Otsu M., Nagasawa T., Nakauchi H., Onodera M.

24. INDUCTION OF ANTI-TUMOR IMMUNITY AGAINST THE MELANOMA ANTIGEN gp100 USING DENDRITIC CELLS GENETICALLY MODIFIED WITH THE RETROVIRAL VECTOR DΔNsam

Fujisawa Y., Nabekura T., Onodera M.

25. INTRAVENOUS ADMINISTRATION OF DENDRITIC CELLS ACTIVATED BY NON-TRANSMISSIBLE SENDAI VIRUS RESULTS IN EFFECTIVE PREVENTION OF SPONTANEOUS LUNG METASTASIS OF AT6.3 PROSTATE CANCER

Kato T., Ueda Y., Yoneyama Y., Matsunaga A., Harada Y., Komaru A., Inoue M., Hasegawa M., Komiya A., Suzuki H., Kinoh H., Ichikawa T., Yonemitsu Y.

26. IMMUNO-GENE THERAPY AGAINST HEPATOCELLULAR CARCINOMA BY SUBCUTANEOUS INJECTION OF ADENOVIRUS VECTOR EXPRESSING CD40 LIGAND

Iida T., Shiba H., Misawa T., Yanaga K., Ohashi T., Eto Y.

27. TARC ENHANCED THE ANTITUMOR IMMUNE EFFECTS OF GM-CSF IN TUMOR VACCINE MOUSE MODEL

Inoue H., Nakamura T., Xin M., Sakaguchi G., Kurita R., Nakazaki Y., Yonemitsu Y., Takayama K., Nakanishi Y., Tani K.

28. IMMUNIZATION OF DNA ENCODING ANTIGEN MOLECULES AND FAS LIGAND ENHANCES ANTIGEN-SPECIFIC ANTIBODY PRODUCTION

Kawamura K., Tagawa M.

**Oral Session II (Abstracts 29-62)
Day II: August 25, 2006**

Cancer II (Oncolytic Virus & Others) 13:20-14:30, Hall A(2F)

Chairpersons: Toshiyoshi Fujiwara, Yoshiro Niitsu

29. TUMOR TARGETING OF AN ONCOLYTIC ADENOVIRUS REGULATED BY TRANSTHYRETIN PROMOTER ON MALIGNANT ASCITES ASSOCIATED WITH HEPATOCELLULAR CARCINOMA

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

30. COMBINATION EFFECT OF ONCOLYTIC ADENOVIRUS, OBP-301, AND PROAPOPTOTIC GENE THERAPIES: POTENTIAL SYNERGIES AND HURDLES FOR ARMING ONCOLYTIC ADENOVIRUS WITH THERAPEUTIC GENES

Kagawa S., Hioki M., Sakai R., Tanaka N., Fujiwara T.

31. SERIES OF THREE ADMINISTRATIONS OF ONCOLYTIC VESICULAR STOMATITIS VIRUS VIA THE HEPATIC ARTERY IS EFFECTIVE IN TREATMENT OF MULTI-FOCAL COLORECTAL CANCER METASTASES IN THE LIVER OF IMMUNE-COMPETENT RATS

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

32. AN ONCOLYTIC HSV1 MUTANT EXPRESSING ICP34.5 UNDER CONTROL OF A NESTIN PROMOTER INCREASES SURVIVAL OF ANIMALS, EVEN WHEN SYMPTOMATIC FROM A BRAIN TUMOR

Kambara H., Ichikawa T., Inoue S., Kosaka H., Okano H., Chiocca E. A., Saeki Y., Date I.

33. CANCER VIROTHERAPY USING EFFICIENT RETARGETING OF ONCOLYTIC MEASLES VIRUSES TO ANY DESIRED RECEPTOR

Nakamura T., Russell S. J.

34. ENHANCEMENT OF TRANSDUCTION WITH REPLICATION-COMPETENT RETROVIRUS VECTORS USING HELPER-DEPENDENT ADENOVIRUS

Kubo S., Haga K., Kasahara N.

35. TELOMERASE-SPECIFIC REPLICATION-SELECTIVE VIROTHERAPY FOR PROSTATE CANCER

Kaku H., Nasu Y., Huang P., Saika T., Kagawa S., Fujiwara T., Kumon H., Urata Y.

Vector Development II (Non-viral & Other Viral Vectors) 14:30-16:00, Hall A(2F)

Chairpersons: Mamoru Hasegawa, Kounosuke Mitani

36. EFFICIENT DELIVERY OF siRNA TARGETING BRAIN ENDOTHELIAL CELLS

Nishina K., Yokota T., Hino T., Yoshida M., Terasaki T., Mizusawa H.

37. *IN VIVO* ANALYSIS OF NEW RNAi STRATEGY; SELECTIVE SUPPRESSION OF A MUTANT ALLELE TO ANY MUTATION

Kubodera T., Yokota T., Saito Y., Mizusawa H.

38. TREATMENT OF HEPATIC FIBROSIS IN RAT TREATED WITH DIMETHYLNITROSAMINE BY siRNA/HSP47 ENCAPSULATED IN VITAMIN A CONJUGATED LIPOSOME

Sato Y., Kato J., Murase K., Kobune M., Sato T., Takimoto R., Matsunaga T., Takayama T., Niitsu Y.

**39. FAST-TRACK SUPPLY OF NON-VIRAL VECTORS
THE MANUFACTURING POINT OF VIEW**

Huber H.

**40. HUMAN PERIPHERAL MONOCYTES ARE NOVEL GENE DELIVERY SYSTEM OF
SENDAI VIRUS VECTOR**

*Tanaka T., Inoue H., Asahi S., Takasugi K., Kurita R., Inoue M., Hasegawa M., Ono F., Terao K.,
Yoshikawa Y., Nakamura T., Tani K.*

**41. ERADICATION OF THE SENDAI VIRUS VECTOR GENOME IN PRIMATE EMBRYONIC
STEM CELLS BY KNOCKOUT SERUM REPLACEMENT (KSR)**

Kishi Y., Inoue M., Tanaka Y., Ikeda T., Shibata H., Hasegawa M., Hanazono Y.

**42. PERSISTENT GENE EXPRESSION FROM A NOVEL RNA VIRUS VECTOR BASED ON
SENDAI VIRUS CL.151 STRAIN**

Nishimura K., Segawa H., Goto T., Morishita M., Sakaguchi T., Yoshida T., Takayama K., Nakanishi M.

**43. OPTIMIZED DOUBLE GENE VECTOR TO CIRCUMVENT ATTENUATION OF GENE
EXPRESSION BY THE PROMOTER INTERFERENCE**

Uchida N., Hanawa H., Yamamoto M., Shimada T.

**44. DETERMINANTS FOR EGF RECEPTOR-MEDIATED HSV ENTRY: COMPARISON IN
TRANSDUCTION EFFICIENCY BETWEEN EGF-LIGAND AND SINGLE CHAIN OF
ANTIBODY AS ADAPTER'S COMPONENT**

Nakano K.

Congenital Disease 16:10-18:00, Hall A(2F)

Chairpersons: Yoichi Matsubara, Shinichi Takeda

45. EFFECTIVE REPETITIVE DYSTROPHIN GENE TRANSFER INTO SKELETAL MUSCLE OF ADULT *mdx* MICE USING A HELPER-DEPENDENT ADENOVIRUS VECTOR EXPRESSING CAR AND DYSTROPHIN

Uchida Y., Maeda Y., Kimura E., Uchino M.

46. RESTORATION OF PHYSICAL PERFORMANCE IN SYMPTOMATIC UTROPHIN/DYSTROPHIN DOUBLE KNOCKOUT MICE BY THE HELPER-DEPENDENT ADENOVIRUS VECTOR (HDA_{dv})-MEDICATED FULL-LENGTH DYSTROPHIN EXPRESSION

Ishizaki M., Kawano R., Uchida Y., Kimura E., Uchino M., Maeda Y.

47. LENTIVIRUS MEDIATED DYSTROPHIN EXPRESSION IN *mdx* MUSCLES

Kimura E., Li S., Fall B. M., Haraguchi M., Meuse L., Uchino M., Chamberlain J. S.

48. A RECOMBINANT AAV-MEDIATED GENE TRANSFER INTO CANINE SKELETAL MUSCLE

Ohshima S., Nishiyama A., Yuasa K., Nakamura A., Yoshimura M., Miyagoe-Suzuki Y., Nakai H., Takeda S.

49. EFFICACY OF ADENO-ASSOCIATED VIRUS SEROTYPE 8 IN α -SARCOGLYCAN DEFICIENT MICE

Nishiyama A., Beryl A. N., Yuasa K., Nakai H., Takeda S.

50. UTILITY OF AAV SEROTYPE-BASED VECTORS IN MICE AND NON-HUMAN PRIMATES

Mizukami H., Mimuro J., Ishiwata A., Ono F., Matsushita T., Okada T., Urabe M., Kume A., Terao K., Sakata Y., Ozawa K.

51. ENDOTHELIAL CELL SPECIFIC EXPRESSION OF HUMAN FACTOR IX GENE DRIVEN BY THE ENHANCED PAI-1 PROMOTER IN MICE USING AAV1 VECTORS

Takano K., Mimuro J., Mizukami H., Ishiwata A., Kashiwakura Y., Niimura M., Okada T., Ohmori T., Madoiwa S., Sugo T., Kume A., Ozawa K., Sakata Y.

52. LIVER-DIRECTED GENE THERAPY FOR HAEMOPHILIA A WITH ADENO-ASSOCIATED VIRUS (AAV) VECTORS CARRYING THE B DOMAIN-DELETED FACTOR VIII GENE

Ishiwata A., Mimuro J., Mizukami H., Kashiwakura Y., Niimura M., Takano K., Ohmori T., Sugo T., Madoiwa S., Okada T., Kume A., Ozawa K., Sakata Y.

53. EVALUATION OF ERYTHROPOIETIN-RESPONSIVE SELECTIVE CELL AMPLIFIER IN A MOUSE MODEL OF X-LINKED CHRONIC GRANULOMATOUS DISEASE

Kume A., Matsuda M., Ueda Y., Matsushita T., Mizukami H., Urabe M., Okada T., Hasegawa M., Ozawa K.

54. LENTIVIRUS MEDIATED GENE THERAPY FOR KRABBE DISEASE

Kobayashi H., Morita A., Ohashi T., Eto Y.

55. AAV1 MEDIATED GENE THERAPY OF NEONATAL FABRY MICE

Ogawa K., Hirai Y., Zenri K., Fukunaga Y., Shimada T.

Neuronal Disease 13:30-14:40, Hall B(3F)

Chairpersons: Hideki Mochizuki, Shin-ichi Muramatsu

56. HIGHLY EFFICIENT INTRANASAL VACCINATION FOR ALZHEIMER'S DISEASE BASED ON THE CYTOPLASMIC RNA VECTOR, SENDAI VIRUS VECTOR

Inoue M., Hara H., Tokusumi Y., Kurosawa N., Kanaya T., Hironaka T., Yonemitsu Y., Tabira T., Hasegawa M.

57. DNA POLYMORPHISM AND MUTATION ANALYSIS OF HUMAN HIPPOCAMPAL CHOLINERGIC NEUROSTIMULATING PEPTIDE (HCNP) PRECURSOR PROTEIN GENE IN ALZHEIMER'S DISEASE

Okita K., Maki M., Matsukawa N., Nakazawa H., Hattori M., Yamawaki T., Ojika K.

58. NEURONAL SPECIFICITY OF α -SYNUCLEIN TOXICITY AND THE EFFECT OF PARKIN CO-EXPRESSION IN PRIMATES

Yasuda T., Mochizuki H., Mizuno Y.

59. PHOSPHORYLATED α -SYNUCLEIN REGULATES THE CELL DEATH IN THE SUBSTANTIA NIGRA OF PARKINSON'S DISEASE MODEL

Hayashita-Kinoh H., Hayakawa H., Mizuno Y., Mochizuki H.

60. ANALYSIS OF NEUROSPHERE DERIVED FROM ADULT OLFACTORY BULB IN PARKINSON'S DISEASE MODELS FOR *EX VIVO* GENE THERAPY

Mochizuki H., Hayakawa H., Hayashita-Kinoh H., Mizuno Y.

61. VEGF 120 GENE TRANSFER BY ELECTROPORATION DOES NOT IMPROVE DIABETIC SENSORY NEUROPATHY IN MICE

Murakami T., Imada Y., Shimada Y., Nakamura A., Sunada Y.

62. LIPOSOME-MEDIATED INTERFERON-BETA GENE DELIVERY PROMOTES FUNCTIONAL RECOVERY AFTER SPINAL CORD INJURY : A NOVEL APPLICATION TO NEURONAL REGENERATION

Ito M., Natsume A., Takeuchi H., Wakabayashi T., Fujii M., Shimato S., Ito S., Katsumata S., Yoshida J.

Oral Session III (Abstracts 63-87)
Day III: August 26, 2006

Acquired Disease 14:20-15:10, Hall A(2F)

Chairpersons: Ikunoshin Kato, Ryuichi Morishita

63. PREVENTION OF RAT PULMONARY HYPERTENSION BY ADENO-ASSOCIATED VIRUS VECTOR-MEDIATED PROSTACYCLIN SYNTHASE EXPRESSION

Ito T., Okada T., Mimuro J., Miyashita H., Nonaka-Sarukawa M., Mizukami H., Kume A., Yamamoto K., Takahashi M., Ikeda U., Sakata Y., Shimada K., Ozawa K.

64. AAV VECTOR-MEDIATED INTERLEUKIN-10 EXPRESSION UPREGULATES HO-1 TO PREVENT HYPERTENSION IN DAHL-SALT SENSITIVE RATS

Sarukawa M., Okada T., Yoshioka T., Ito T., Nomoto T., Mizukami H., Kume A., Yamamoto K., Ikeda U., Shimada K., Ozawa K.

65. DEVELOPMENT OF ANTI-HIV GENE THERAPY STRATEGY USING NOVEL ENDORIBONUCLEASE, MazF (I)

Chono H., Matsumoto K., Shimada M., Mineno J., Inouye M., Kato I.

66. DEVELOPMENT OF ANTI-HIV GENE THERAPY STRATEGY USING NOVEL ENDORIBONUCLEASE, MazF (II)

Mineno J., Chono H., Lee K., Matsumoto K., Shimada M., Yu S. S., Kim Sujeong, Kim Sunyoung, Kato I.

67. HB-EGF GENE THERAPY IS MORE POTENTLY THERAPEUTIC (PROTECTIVE AND MITOGENIC FOR HEPATOCYTES) THAN HGF FOR HEPATIC INJURY IN MICE

Khai N. C., Takahashi T. Murofushi Y., Kosai K.

Vector Development III (Adenoviral Vector) 15:10-16:00, Hall A(2F)

Chairpersons: Yumi Kanegae, Takehide Murata

68. JNK2 DEFICIENT CELLS ACQUIRE HIGH ADENOVIRAL INFECTIVITY AND ADENOVIRUS-MEDIATED TRANSGENE EXPRESSION

Teraishi F., Kagawa S., Fujiwara T., Tanaka N.

69. DOWNREGULATION OF CD46 BY ADENOVIRUS SEROTYPE 35 VECTORS

Sakurai F., Akitomo K., Kawabata K., Mizuguchi H.

70. ELIMINATION OF INNATE IMMUNE RESPONSES BY CAPSID-MODIFICATION OF ADENOVIRUS VECTORS

Koizumi N., Kawabata K., Sakurai F., Hayakawa T., Watanabe Y., Mizuguchi H.

71. DIRECT SELECTION OF TARGETED VECTOR FROM A RANDOM PEPTIDE LIBRARY DISPLAYED ON ADENOVIRAL FIBER KNOB

Aoki K., Yoshida K., Miura Y., Hatanaka K., Nishimoto T., Ohnami S., Yoshida T.

72. ESTABLISHMENT OF THE RECOMBINANT VIRUS DATABASE AND THE ADENOVIRAL VECTOR CONSTRUCTION SYSTEM LICCA

Murata T., Terashima M., Inabe K., Pan J., Kimura M., Yokoyama K. K.

Stem Cell 16:10-17:20, Hall A(2F)

Chairpersons: Yutaka Hanazono, Makoto Otsu

73. FORCED EXPRESSION OF THE TRUNCATED CXCR4 RECEPTOR IN MURINE HEMATOPOIETIC STEM CELLS LEADS TO DECREASED RECEPTOR INTERNALIZATION AND ENHANCED CELL MIGRATION IN RESPONSE TO SDF1

Iimura Y., Otsu M., Maeyama Y., Ariga T., Kondo S., Onodera M.

74. HUMAN KUSABIRA ORANGE (huKO) AS A NEW FLUORESCENT MAKER PROTEIN FOR HEMATOPOIETIC STEM CELLS

Sanuki S., Nabekura T., Otsu M., Karasawa S., Miyawaki A., Nagasawa T., Onodera M.

75. IN VIVO REPOPULATION OF SYNGENIC HEMATOPOIETIC CELLS TRANSFECTED BY RECOMBINANT SENDAI VIRUS - AN ADVANCED REPORT

Yoshida K., Yonemitsu Y., Okano S., Nagata S., Shibata S., Kondo H., Nagata-Takeshita H., Arimatsu C., Yoshizaki M., Inoue M., Hasegawa M., Sueishi K.

76. PRODUCTION OF MEGAKARYOCYTES AND PLATELETS FROM COMMON MARMOSET (*Callithrix jacchus*) ES CELLS BY CONSTITUTIVE EXPRESSION OF tal1/scl GENE

Yokoo T., Kurita R., Suehiro Y., Takasugi K., Oikawa T., Imoto H., Nakamura T., Tanioka Y., Sasaki E., Tani K.

77. SUICIDE GENE TRANSDUCTION OF EMBRYONIC STEM CELLS REDUCES RISK OF TERATOMA FORMATION

Muramatsu S., Kodera M., Nara Y., Takino N., Sato K., Kakiuchi T., Okuno T., Konishi N., Michibata H., Suzuki Y., Kondo Y., Nito S., Tsukada H., Nakano I.

78. USE OF GENETICALLY ENGINEERED MESNCHYMAL STEM CELLS FOR TREATMENT OF EXPERIMENTAL GLIOMAS

Namba H., Li S., Tokuyama T., Yamamoto J., Yokota N.

79. HUMAN NEURAL STEM CELL-BASED GENE THERAPY TARGETING EXPERIMENTAL LEPTOMENINGEAL DISSEMINATION OF MEDULLOBLASTOMA

Shimato S., Natsume A., Takeuchi H., Wakabayashi T., Mizuno M., Fujii M., Ito M., Ito S., Kim S.U., Yoshida J.

Cancer III 14:20-15:40, Hall B(3F)

Chairpersons: Yoshikazu Sugimoto, Teruhiko Yoshida

80. IMPROVEMENT OF QUALITY OF LIFE OF PATIENTS WITH METASTATIC OR LOCAL RECURRENT PROSTATE CANCER AFTER PHASE I/II CLINICAL TRIAL OF Ad-OC-TK PLUS VALACYCLOVIR

Terao S., Shirakawa T., Miyata M., Kubo S., Fujisawa M., Gotoh A.

81. BIOLOGICAL RESPONSE DETERMINANTS *IN SITU* HSV-TK + GANCICLOVIR GENE THERAPY FOR PROSTATE CANCER PATIENTS

Satoh T., Baba S., Kadmon D., Ayala G., Shalev M., Godor Y., Fujita T., Matsumoto K., Tabata K., Yamashita H., Timme T. L., Wheeler T. M., Miles B. J., Teh B. S., Butler E. B., Thompson T. C.

82. THE HISTONE-ASSOCIATED CHROMATIN FORM IS INVOLVED IN THE IMPROVED rAAV-MEDIATED TRANSDUCTION BY HDAC INHIBITOR

Okada T., Uchibori R., Iwata-Okada M., Nonaka-Sarukawa M., Ito T., Yuhe L., Matsushita T., Urabe M., Mizukami H., Kume A., Ozawa K.

83. DEVELOPMENT OF THE VECTOR-PRODUCING TUMOR-TRACKING CELLS FOR IMPROVED SUICIDE CANCER GENE THERAPY

Uchibori R., Okada T., Onodera M., Matsushita T., Urabe M., Mizukami H., Kume A., Ozawa K.

84. ADENO-ASSOCIATED VIRAL (AAV) VECTOR-MEDIATED SYSTEMIC DELIVERY OF MDA-7/IL24 INHIBITS TUMOR GROWTH BY ANTITUMOR BYSTANDER EFFECT

Tahara I., Miyake K., Hirai Y., Kurai T., Uchida E., Tajiri T., Shimada T.

85. ELECTROGENE THERAPY USING *ENDOSTATIN* SUPPRESSES MURINE MAMMARY CANCER METASTASES BUT NOT THE SYNERGISTIC EFFECTS IN COMBINATION WITH SUICIDE GENE

Shibata M., Morimoto J., Otsuki Y.

86. ANTISENSE AND NONANTISENSE EFFECTS OF ANTISENSE *Bcl-2* ON MULTIPLE ROLES OF *Bcl-2* AS A CHEMOSENSITIZER IN CANCER THERAPY

Kim R., Emi M., Matsuura K., Tanabe K.

87. NON-INVASIVE *IN VIVO* MONITORING OF ADENOVIRUS REPLICATION AND ITS APPLICATION FOR TUMOR DETECTION

Davydova J., Ono H. A., Le L. P., Yamamoto M.