THE 11th ANNUAL MEETING

2005

JAPAN SOCIETY OF GENE THERAPY

PROGRAM AND ABSTRACTS

Date
July 28-30, 2005

Venue
The JIKEI University School of Medicine
(Daigaku Ichigou-Kan)

3-25-8, Nishi-Shinbashi, Minato-ku,

Tokyo

Invited Lectures (I ~ VIII)

Invited Lecture – I

Date : July 28, 2005
15:00-16:00, Hall (A)
Chairperson: Shigetaka Asano

Manuel Grez *(Georg-Speyer-Haus)*

Reconstitution of Phagocytic Killing in X-CGD Patients after Gene Therapy

Invited Lecture – II

Date : July 29, 2005
9: 00-9:40, Hall (A)
Chairperson: Toya Ohashi

Seng H. Cheng *(Genzyme Corporation)*

Prospects for AAV-Mediated Gene Therapy of Lysosomal Storage Disorders

Invited Lecture – III

Date : July 29, 2005
11:00-12:00, Hall (A)
Chairperson: Yoshikatsu Eto

Mark Kay *(Stanford University, Stanford CA).*

Gene Transfer Vector Strategies for Treating Hemophilia and Viral Hepatitis Infection

Invited Lecture – IV

Date : July 29, 2005
13:00-13:40, Hall (A)
Chairperson: Jun Yoshida

DC Yu *(Cell Genesys, Inc.)*

Development of Conditionally Replicating Oncolytic Adenoviruses for the Treatment of Cancers: CG7870 and CG0070

Invited Lecture – V

Date : July 29, 2005
13:40-14:20, Hall (A)
Chairperson: Keiya Ozawa

Philip D. Gregory *(Sangamo BioSciences, Inc.)*

Engineered Zinc Finger Proteins: Genome Editors with Therapeutic Potential

Invited Lecture – VI

Date : July 29, 2005
14:20-15:00, Hall (A)
Chairperson: Kazuhiro Ikenaka

Seung U. Kim *(University of British Columbia, Canada)*

Human Neural Stem Cells Genetically Modified for Gene/Cell Therapy in Neurological Disorders

Invited Lecture – VII

Date : July 30, 2005
11:30-12:00, Hall (A)
Chairperson: Hirofumi Hamada

Masato Yamamoto *(University of Alabama at Birmingham)*

Improving Adenovirus-Based Virotherapy Agents

Invited Lecture – VIII.

Date : July 30, 2005
13:00-13:40, Hall (A)
Chairperson: Takashi Shimada

Jakob Reiser *(Louisiana State University Health Sciences Center, New Orleans)*

Lentiviral Vectors: Promising Tools for Therapy and Basic Research

Special Symposium

Day III : July 30, 2005

Clinical Trials of Gene Therapy in Japan

13:40-16:40, Hall (A)

Chairpersons: Yoshirou Niitsu, T Sasazuki

1. ***Toshiyoshi Fujiwara*** *(Okayama University)*

Multicenter Phase I Study of Repeated Intratumoral Delivery of Adenoviral p53 (ADVEXIN) in Patients with Advanced Non-small Cell Lung Cancer

2. ***Takenori Ochiai*** *(Chiba University)*

Result of Phase I/II Adenoviral p53 Gene Therapy for Chemo-radiation-resistant Locally Advanced Esophageal Squamous Cell Carcinoma

3. ***Hiromi Kumon*** *(Okayama University)*

Current Status of *In situ* Gene Therapy for Prostate Cancer

4. ***Akinobu Goto*** *(Kobe University)*

Phase I/II Clinical Trial of Gene Therapy for Hormone Refractory Metastatic Prostate Cancer

5. ***Ryuuichi Morishita*** *(Osaka University)*

Phase I/IIa Clinical Trial Using Hepatocyte Growth Factor Gene to Treat Peripheral Arterial Disease by Therapeutic Angiogenesis (TREAT-HGF)

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

GM-CSF Immune Gene Therapy of Renal Cell Carcinoma as a Translational Research

7. ***Jun Yoshida*** *(Nagoya University)*

Translational Research of Interferon- β Gene Therapy for Malignant Glioma by means of DNA / Liposome

8. ***Toshiaki Saida*** *(Shinshu University Hospital)*

Cationic Liposome-Mediated Human Interferon-β (HuIFN β) Gene Therapy for Patients with Advanced Melanoma

9. ***Tadashi Ariga*** *(Hokkaido University)*

Clinical Status of Two Patients with ADA-SCID Who Received Hematopoietic Stem Cell Gene Therapy without Myelopreparative Conditioning

10. ***Yoshikazu Sugimoto*** *(Kyoritsu University of Pharmacy)*

A Clinical Study of *MDR1* Gene Therapy: Oligoclonal Expansion of the *MDR1*-Transduced Cells *In vivo* by Docetaxel

11. ***Masafumi Onodera*** *(University of Tsukuba)*

Gene and Cell Therapy for Relapsed Leukemia after Allogeneic Stem Cells Transplantation

Symposium I (Abstracts 1~8)

Day I : July 28, 2005

Gene Therapy of Cancer* 13:00-15:00, Hall (A*)

Chairpersons: Kenzaburo Tani, Teruhiko Yoshida

1. **Development of Conditionally Replicative Adenoviruses with Imaging Capability**
   Davydova G. J., Ono A. H., Le P. L., Yamamoto S., Yamamoto M.
2. **CEA-Targeted Selective Gene Therapy for Gastric Cancer through FZ33 Fiber-Modified Adenoviral Vectors**
   Tanaka T., Kuroki M., Huang J., Hirai S., Watanabe N., Hamada H.
3. **Enhanced Antitumor Efficacy of Telomerase-Selective Oncolytic Adenoviral Agent with Docetaxel: Preclinical Evaluation of Oncolytic Chemovirotherapy**
   Kagawa S., Fujiwara T., Kishimoto H., Endo Y., Hioki M., Sakai R., Kawamura H., Nagai K., Urata Y., Tanaka N., Fujiwara T.
4. **Syncytial Formation Induced by Fusogenic Oncolytic Herpes Simplex Viruses can Effectively Suppress Peritoneal Dissemination of Gastric Cancer**
   Nakamori M., Iwahashi M., Ueda K., Nakamura M., Tsuji T., Tsujimura H., Naka T., Ishida K., Ojima T., Zhang X., Yamaue H.
5. **Antitumor Efficacy of Intravenous Administration of Oncolytic Herpes Simplex Virus Expressing Interleukin 12**
   Guan Y., Ino Y., Fukuhara H., Todo T.
6. **Preclinical Study of Readministration with Vesicular Stomatitis Viruses Via the Hepatic Artery in Immune-competent Rat Multi-focal HCC Model**
   Shinozaki K., Yamaki M., Woo L.C.S., Asahara T.
7. **Tumor-Selective Gene Expression in Hepatic Metastasis Using a Replication-Competent Retrovirus Vector**
   Hiraoka K., Kimura T., Logg C., Kondo S., Kasahara N.
8. **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., Ebara S., Kaku H., Saika T., Thompson T.C., Kumon H.

Symposium II (Abstracts 9~13)

Day II : July 29, 2005

Gene Therapy of Genetic Diseases* 9:40-11:00, Hall (A*)

Chairpersons: Fumio Endo, Yoichi Matsubara

9. **Gene Therapy for Adenosine Deaminase Deficiency Targeting Autologous Bone Marrow CD34+ Cells**
   Hatano N., Ohtsu M., Sakiyama Y., Ariga T.
10. **Co-Expression of FGE is Essential for Over-Expression of Arylsulfatase A in MLD Model Mice**
    Takakusaki Y., Hisayasu S., Adachi K., Hirai Y., Shimada T.
11. **Neonatal Intervention to Overcome Gender-Specific Barrier in AAV-Mediated Gene Therapy for Phenylketonuria**
    Kume A., Ogura T., Mizukami H., Okada T., Urabe M., Matsushita T., Ozawa K.
12. **Gene Mediated Enzyme Replacement Therapy of Fabry Disease by AAV Serotype 1Vector**
    Ogawa K.,Hirai Y., Zenri K., Fukunaga Y., Shimada T.
13. **A Novel Gene Therapy Strategy for Vascular Ehlers-Danlos Syndrome by the Combination with RNAi Mediated Inhibition of a Mutant Allele and Transcriptional Activation of a Normal Allele in Vascular EDS Fibroblast**
    Watanabe A., Wada T., Tei K., Hata R., Fukushima Y., Shimada T.

Symposium III (Abstracts 14~18)

Day III : July 30, 2005

Stem Cell Based Therapy* 8:30-10:00, Hall (A*)

Chairpersons: Tatsutoshi Nakahata, Hiromitsu Nakauchi

14. **Positional Effects of Proviruses Integrated in the Host Genome on Maintenance of the Transgene Expression in Mice Generated from Retrovirally Transduced Embryonic Stem Cells**
    Hamanaka S., Otsu M., Nagasawa T., Nakauchi H., Onodera M.
15. **Exogenous Gene Expression Using the Third Generation Lentiviral Vector Induced Hematopoietic Cell Differentiation of Common Marmoset (*Callithrix jacchus*) Embryonic Stem Cells**
    Yokoo T., Kurita R., Sasaki E., Hiroyama T., Izawa K., Tanioka Y., Soda Y.,

Nakazaki Y., Tani K.

16. **Bystander Effect-Mediated Gene Therapy of Gliomas Using Herpes Simplex Virus Thymidine Kinase Gene-Transduced Neural Stem Cells and Ganciclovir**
Namba H., Li S., Tokuyama T., Yamamoto J., Yokota N.
17. **Potential Utility of Adipose-Derived Mesenchymal Stem Cells as a Carrier for *Ex vivo* Gene Therapy-Comparison of Stem Cells Derived from Fat and Bone Marrow-**
Ogawa R., Hanawa H., Hirai Y., Kurai T., Mizuno H., Hyakusoku H., Shimada T.
18. **Transient MSX1 Expression in Skeletal Muscle Induces Immature Cells with Hematopoietic Activity *In situ***
Nobuyoshi M., Kume A., Mizukami H., Matsushita T., Okada T., Urabe M., Ohgoshi Y., Endo T., Ozawa K.

Symposium IV (Abstracts 19~23)

Day III : July 30, 2005

Vector Development* 10:00-11:30, Hall (A*)

Chairpersons: Yasufumi Kaneda, Masashi Onodera

19. **L1 Retrotransposition in Quiescent and Primary Human Somatic Cells and in the Mouse Liver Parenchyma after Efficient Transduction with an Adenovirus-Retrotransposon Hybrid**
Kubo S., Soifer H.S., Seleme M., Moran J.V., Kazazian Jr. H.H., Kasahara N.
20. **CD9 Gene Therapy Directly Normalizes Hypertrophy and Tachycardia on Cardiomyocytes and Abolishes the Fatality After Myocardial Infarction in Mice**
Kosai K., Takahashi T.
21. **Prevention of Rat Pulmonary Hypertension by Adeno-Associated Virus Vector-Mediated Sustained Interleukin-10 Expression**
Ito T., Okada T., Miyashita H., Sarukawa M., Nomoto T., Yoshioka T., Maeda Y., Mizukami H., Matsushita T., Kume A., Yamamoto K., Takahashi M., Ikeda U., Shimada K., Ozawa K.
22. **A Preclinical Safety Study of Simian Immunodeficiency Virus (SIVagm)-Based Lentiviral Vector for Retinal Gene Transfer in Non-Human Primates**
Ikeda Y., Miyazaki M., Kohno R., Yonemitsu Y., Murata T., Goto Y., Tabata T.,

Terao K., Ueda Y., Hasegawa M., Tobimatsu S., Ishibashi T., Sueishi K.

23. ***In vivo*** **Assessment of Transgene-Mediated Dopamine Synthesis by Positron Emission Tomography in a Primate Model of Parkinson's Disease**
Muramatsu S., Nara Y., Kakiuchi T., Ono F., Kodera M., Takino N., Nishiyama S., Harada N., Fukuyama D., Tsuchida J., Terao K., Tsukada H., Nakano I., Ozawa K.

Oral Session 1 (Abstracts 24~47)

Day I : July 28, 2005

Vector Development-(1) 16:00-17:20, B Hall

Chairpersons: Hiroyuki Mizuguchi, Kounosuke Mitani

24. Purification of Infectious Adenovirus in Two Hours by Ultracentrifugation and Tangential Flow Filtration
    Ugai H., Inabe K., Terashima M., Murata T., Yokoyama K. K.
25. Characterization of Adenovirus Serotype 35 Vector-Mediated In Vivo Transduction Using Human CD46-Transgenic Mice
    Sakurai F., Kawabata K., Koizumi N., Inoue N., Okabe M., Yamaguchi T., Hayakawa T., Mizuguchi H.
26. Frequency of Random and Targeted Chromosomal Integration of Helper-Dependent Adenoviral Vector
    Ohbayashi F., Kishimoto A., Mitani K.
27. Prime-Boost Vaccination with Plasmid DNA and a Chimeric Adenovirus Type 5 Vector with Type 35 Fiber (AD5/35) Induces Protective Immunity Against SHIV89.6P Infection in Monkeys
    Xin K-Q., Someya K., Mizuguchi H., Takeshita F., Sasaki S., Honda M., Okuda K.
28. *In Vivo* Stable Transduction of Humanized Liver Tissue in Chimeric Mice Via High-Capacity Adenovirus-Lentivirus Hybrid Vector
    Kubo S., Kataoka M., Tateno C., Palmer D.J., Ng P., Yoshizato K., Kasahara N.
29. Relationship Between Adenoviral GM-CSF Transduction Efficiency into Tumor Cells and their Membrane Receptor (CAR, Integrin a v b 3 and Integrin a v b 5) Expression
    Inoue H., Hisano T., Nakazaki Y., Sakaguchi G., Kurita R., Takayama K., Nakanishi Y., Tani K.
30. Sustained Stable Gene Expression Induced by A Cytoplasmic RNA-Virus Vector Based on Mutant Sendai Virus Strain CL. 151
    Nishimura K., Segawa H., Goto T., Morishita M., Sakaguchi T., Yoshida T., Takayama K., Nakanishi M.

31. Molecular Design of New Class Cytoplasmic Genotoxicity-Free RNA Vector; Sendai Virus Vector
Inoue M., Iwasaki H., Yoshizaki M., Tagawa A., Washizawa K., Hironaka T., Hasegawa M.

Neurological Diseases 17:20-18:00, B Hall

Chairpersons: Shouji Tsuji, Shinichi Muramatsu

32. siRNA to SOD1 Gene Prevented the Disease in Transgenic Mouse Model of the Amyotrophic Lateral Sclerosis
Yokota T., Mizusawa H.
33. Downregulation of a-Synuclein Expression Can Rescue Dopaminergic Cells from Cell Death in the Substantia Nigra of Parkinson's Disease Rat Model
Hayashita-Kinoh H., Yamada M., Yokota T., Mizuno Y., Mochizuki H.
34. AAV-Parkin Gene Therapy Improved Dopaminergic Cell Death in Sporadic Parkinson's Diseased Model
Mochizuki H., Yamada M., Mizuno Y.
35. Analysis for Functional Interaction Between Alfa-Synuclein and UCH-L1 *in vivo*
Yasuda T., Nihira T., Wada K., Mochizuki H., Mizuno Y.

Cardiovascular Diseases & Others 16:00-17:10, C Hall

Chairpersons: Ryuichi Morishita, Yoshikazu Yonemitsu

36. Bcl-xL Gene Transfer Inhibits Bax Translocation and Prolongs Cardiac Cold Preservation Time in Rat
Huang J., Nakamura K., Uzaka T., Kato K., Hamada H.
37. Suppression of Neointimal Formation in a Canine Model of Vein Graft Disease by Adenovirus-Mediated Anti Monocyte Chemoattractant Protein-1 Gene Therapy
Kimura S., Egashira K.
38. Prevention of Hypertension and Heart Failure in DAHL Salt-Sensitive Rats by Intramuscular Delivery of AAV Vector Expressing Interleukin-10
Sarukawa M., Okada T., Yoshioka T., Ito T., Nomoto T., Mizukami H., Kume A., Yamamoto K., Ikeda U., Shimada K., Ozawa K.

39. Synthetic Pyrrole-Imidazole Polyamide Inhibits Expression of the Human Lectin-Like Oxidized LDL Receptor 1 Gene
Ueno T., Fukuda N., Matsumoto K., Sugiyama H., Sawamura T.
40. Improvement Mechanism of Diabetic Sensory Neuropathy in Mice by VEGF Electro-Gene Therapy
Murakami T., Arai M., Nakamura A., Sunada Y.
41. Prothymosin a Lacking the Nuclear Localization Signal as an Effective Gene Therapeutic Strategy in Collagen-Induced Arthritis
Chang M-Y., Shiau A-L., Chung S-Y., Chen S-Y., Wang C-R., Wu C-L.
42. Effects of Synthetic Pyrrole-Imidazole Polyamide Targeting TGF-b1 Promoter on TGF-b1 Expression and Renal Injury in Rats
Matsuda H., Fukuda N., Ueno T., Matsumoto K., Sugiyama H.

Cancer-(1) 17:10-18:00, C Hall

Chairpersons: Toshiyoshi Fujiwara, Ryuzou Ueda

43. Oncolytic Herpes Simplex Virus Vector G47 Δ in Combination with Androgen Ablation for the Treatment of Human Prostate Adenocarcinoma
Fukuhara H.
44. Efficacy and Safety of a Conditionally Replicative Adenovirus with RGD-Modified Fiber for Biliary Cancer
Wakayama M., Abei M., Seo E., Kawashima R., Murata T., Matsuzaki Y., Hamada H., Yokoyama K. K.
45. ErbB2-Targeted Selective Cancer Gene Therapy through FZ33 Fiber-Modified Adenoviral Vectors
Nakamura K., Li R., Hirai S., Kato K., Masuko T., Yokoyama K.K., Hamada H.
46. PAP2a-Targeted Selective Gene Therapy for Pancreatic, Prostate, and Lung Cancers
Nakamura K., Kato K., Hamada H.
47. Therapeutic Efficacy of Midkine Promoter-Based Replication-Selective Adenovirus Vector to Target the Midkine-Expressing Human Bladder Cancer Cells
Terao S., Shirakawa T., Goda K., Fujisawa M., Gotoh A.

Oral Session 2 (Abstracts 48~82)

Day II : July 29, 2005

Vector Development-(2) 15:00-16:20, B Hall

Chairpersons: Kouichi Miyake, Mamoru Hasegawa

48. The 1.2kb 5'HS4 Insulator Element in Lentiviral Vector LTR Deteriorate Transducing Ability at Reverse Transcription Step
Hanawa H., Shimada T.

49. Efficient Transduction and Prolonged Gene Expression in Murine Nasal Airways Mediated by Simian Immunodeficiency Virus Vectors Pseudotyped with Sendai Virus Glycoproteins F and HN
Mitomo K., Tabata T., Inoue M., Ueda Y., Ikegami M., Fujikawa S., Washizawa K., Griesenbach U., Alton W.F.W.E., Hasegawa M.

50. AAV Vector-Mediated Gene Transfer into Canine Skeletal Muscle
Yuasa K., Yoshimura M., Nishiyama A., Ikemoto M., Ohshima S., Miyagoe-Suzuki Y., McC Howell J., Hijikata T., Takeda S.

51. Large-Scale Purification System for Adeno-Associated Virus Vectors by Using Disposable Ion Exchange Membranes
Okada T., Nonaka-Sarukawa M., Ito T., Uchibori R., Matsushita T., Mizukami H., Kume A., Ozawa K.

52. Analysis of Vector Genome Integration Sites in Various Tissues Following Systemic Ademonistration of AAV Serotype 8 Vector in Mice
Inagaki K., Wu X., Fuess S., Storm T.A., Kay M.A., Nakai H.

53. Type 5 AAV Vector Genome is More Efficiently Packaged into Type 5 Capsids with Type 1 Rep52 than Authentic Rep52 in Insect Cells
Urabe M., Nakakura T., Xin K-Q., Mizukami H., Kume A., Kotin R.M., Ozawa K.

54. Development of Polymer-Conjugated HVJ Envelope Vector to Enhance the Transfection Efficiency In Vitro and In Vivo
Mima H., Kaneda Y.

55. A Safe, Effective In Vivo Gene Transfection by Non-Virus Block Star Vector (BSV)
Nakayama Y., Zhou Y., Huang H., Shiba M.

Genetic Diseases -(1) 16:20-17:10, B Hall

Chairpersons: Aki Kume, Yoshiyuki Suzuki

56. Improvement of Neuropathological Abnormalities in a Huntington's Disease Model by Recombinant AAV-Mediated Delivery of shRNA
Machida Y., Okada T., Kurosawa M., Oyama F., Ozawa K., Nukina N.
57. Application of a Suicide Gene to X-SCID Gene Therapy
Uchiyama T., Ishikawa Y., Onodera M., Du W., Yeng L., Sasahara Y., Sugamura K., Kumaki S., Tsuchiya S.
58. Gene Therapy of Metachromatic Leukodystrophy by AAV Vectors
Kurai T., Kitagawa R., Hisayasu S., Hirai Y., Shimada T.
59. Improvement of Corneal Opacity in Mice with Mucopolysaccharidosis Type VII by Transplantation of Bone Marrow Stroma Cells
Ishikawa K., Kamata Y., Fukuhara Y., Uyama T., Umezawa A., Azuma N., Okuyama T.
60. Gene-Therapy for Hearing Loss in Mucopolysaccharidosis Type VII
Morimoto N., Kosuga M., Fukuhara Y., Ogawa K., Taiji H., Kawashiro N., Okuyama T.

Genetic Diseases -(2) 17:10-18:00, B Hall

Chairpersons: Okuyama, Shin Migita

61. Retrovirus and Lentivirus Mediated Gene Therapy for Krabbe Disease
Kobayashi H., Morita A., Shen J-S., Meng X-L., Ohashi T., Kohn D.B., Eto Y.
62. Embryonic Stem Cells and Gene Therapy for Lysosomal Storage Diseases
Sakurai K., Tajima A., Iizuka S., Kaneshiro E., Suzuki N., Ohashi T., Eto Y.
63. Inadvertent Liver Transduction after AAV8-Based Vector Injection into Adipose Tissue
Mizukami H., Zhang Y.Y., Ogura T., Mimuro J., Okada T., Kume A., Sakata Y., Ozawa K.
64. 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., Okada T., Ohmori T., Madoiwa S., Sugo T., Kume A., Ozawa K., Sakata Y.

65. Neonatal Gene Transfer: Efficient Transgene Expression in Muscles after Intraperitoneal AAV Vector Injection
Ogura T., Mizukami H., Mimuro J., Okada T., Hamada H., Urabe M., Kume A., Yoshikawa H., Sakata Y., Ozawa K.

Cancer-(2) 15:10-16:30, C Hall

Chairpersons: Hideaki Tahara, Kunihiko Yoshimura

66. Recombinant Sendai Virus is an Rapid, Efficient, and Maturation-Inducing Gene Transfer Vector for Dendritic Cells in Cancer Immunotherapy
Okano S., Shibata S., Yonemitsu Y., Inoue M., Hasegawa M., Sueishi K.
67. 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.
68. Anti-Tumor Effect Against Human Carcinoma Cells by Dendritic Cells Transfected with CD40-Ligand
Tomihara K., Kato K., Masuta Y., Nakamura K., Hiratsuka H., Hamada H.
69. Engineered Herpes Simplex Virus Expressing IL-12 for the Treatment of Experimental Subcutaneous and Brain Tumors
Miyamoto S., Ino Y., Fukuhara H., Todo T.
70. Enhanced Anti-Tumor Responses Induced by the Combination of a Couple of Stimulators: IL-12 and CCL27
Sugita T., Gao J-Q., Kanagawa N., Motomura Y., Nakayama T., Yoshie O., Hatanaka Y., Tani Y., Mizuguchi H., Tsutsumi Y., Nakagawa S.
71. Expression of Murine IL-24, a Homologue of Apoptosis-Inducing Human MDA-7, in Murine Tumors does not Induce Apoptosis or Produce Antitumor Effects
Tagawa M., Kawamura K.
72. Non-Cleavable Cell Surface Mutant of CD40-Ligand Induce Immune Response and Prevent Systemic Inflammatory Reaction
Kato K., Masuta Y., Tomihara K., Nakamura K., Hamada H.

73. Induction of Efficient Antitumor Immunity to B16 Melanoma Using Highly Activated SeV/DC Expressing Interferon-Beta. -An Advanced Report.
Shibata S., Yonemitsu Y., Okano S., Nagata S., Takeshita H., Sata S., Inoue M., Furue M., Hasegawa M., Sueishi K.
74. Efficient and Selective Gene Delivery of a Fiber-Modified Adenovirus Vector to Human Myeloma with Anti-CD38 Antibody
Kato K., Masuta Y., Tomihara K., Nakamura K., Hamada H.

Cancer-(3) 16:30-18:00, C Hall

Chairpersons: Hiromi Kumon, Akinobu Goto

75. Combinational Effects of MMP-Targeted Oncolytic Sendai Virus Vector Armed with a Suicide Gene "Yeast Cytosine Deaminase"
Kinoh H., Inoue M., Washizawa K., Yoshizaki M., Yamamoto T., Akiba E., Hasegawa M.
76. Development of a Novel Lentivirus-Based Suicide Gene Therapy Approach Using Modified Human Thymidylate Monophosphate Kinase
Sato T., Neshadim A., Rasaiah V., Konrad M., Lavie A., Medin J.A.
77. Electrogene Transfer of an Epstein-Barr Virus-based Plasmid Replicon Vector containing the Diphtheria Toxin A Gene Suppresses Mammary Carcinoma Growth in SCID Mice
Shibata M., Miwa Y., Miyashita M., Morimoto J., Abe H., Otsuki Y.
78. Systemic Administration of Attenuated Salmonella choleraesuis in Combination with Cisplatin for Cancer Therapy
Shiau A-L., Chang M-Y., Lee C-H., Tai Y-S., Wu C-L.
79. Targeted Therapy against Bcl-2 Protein in Gastric and Breast Cancer Cells
Kim R., Emi M., Tanabe K., Uchida Y.
80. Enhancement of Cisplatin Sensitivity in Squamous Cell Carcinoma of the Head and Neck by Modulation of Survivin Expression Using Adenoviral Vector Encoding Antisense Sequence to Survivin
Kojima H., Iida M., Yaguchi Y., Suzuki R., Manome Y., Moriyama H.

81. Enhancement of Cyclophosphamide Sensitivity in Squamous Cell Carcinoma Transduced by Adenoviral Vector Encoding Cytochrome P-450 2B1 Gene
Iida M., Kojima H., Suzuki R., Manome Y., Moriyama H.

82. Tumor Targeting Anti-Angiogenic Gene Therapy Using NK4-Expressing Bone Marrow-Derived Mesenchymal Stem Cells
Kanehira M., Xin H., Maemondo M., Mizuguchi H., Hayakawa T., Matsumoto K., Nakamura T., Nukiwa T., Saijo Y.

Oral Session 3 (Abstracts 83~97)

Day III : July 30, 2005

Stem Cells-(1) 16:40-17:20, B Hall

Chairpersons: Toshio Suda, Yoshihiro Kitamura

83. Definitive Identification of Embryonic Stem Cell-Derived Target Cells by Adenoviral Conditional Targeting; the successful purification of immature and mature cells in the cardiac lineage and the usefulness for HUMAN ES cells
Kosai K., Takahashi T.

84. *In Vivo* Repopulation of Syngenic Hematopoietic Cells Expressing GFP Transfected by Recombinant Sendai Virus - Toward Development of 'Cytoplasmic Gene Therapy' for Hematopoietic Disorders
Yoshida K., Yonemitsu Y., Okano S., Nagata S., Shibata S., Kondo H., Nagata-Takeshita H., Arimatsu C., Takehara T., Inoue M., Hasegawa M., Sueishi K.

85. Possible Enhancement of Marrow Engraftment in Transplanted Hosts by Retroviral-Mediated Expression of the Truncated CXCR4 Receptors on Donor Hematopoietic Stem Cells
Iimura Y., Otsu M., Maeyama Y., Ariga T., Kondo S., Onodera M.

86. Mobilization of Hematopoietic Progenitor Cells and Pre-B Cells from the Bone Marrow by a SDF-1-Expressing Fiber-Modified Adenovirus Vector
Kawabata K., Sakurai F., Koizumi N., Hayakawa T., Mizuguchi H.

Stem Cells-(2) 17:20-18:00, B Hall

Chairpersons: Nobuhiko Emi, Yutaka Hanazono

87. Combination of Allogeneic Hematopoietic Stem Cell Transplantation and Allogeneic MHC gene Transfer against Solid Cancers
Ohashi M., Kushida M., Yoshida K., Mandai M., Yoshida T., Aoki K.
88. *In Vivo* Selection of FMEV-Type Retrovirus Vector-Transduced Hematopoietic Stem Cells and Little Evidence of their Conversion into Hepatocytes *In Vivo*
Yamaguchi K., Itoh K., Masuda T., Itoh Y., Okanoue T., Fujita J.
89. Sphere Formation of Ocular Epithelial Cells in Ciliary Marginal Zone is a Re-Programming System for Neuronal Differentiation
Kohno R., Ikeda Y., Yonemitsu Y., Hisatomi T., Yamaguchi M., Miyazaki M., Takeshita H., Ishibashi T., Sueishi K.
90. Site-Specific Insertion of Therapeutic DNA into the AAVS1 Locus (19q13.4) in Human Mesenchymal Stem Cells by Using Adeno-Associated Virus Integration Machinery
Rahim A., Urabe M., Soma M., Nakakura T., Mizukami H., Kume A., Ozawa K.

Gene Targeting 16:40-18:00, C Hall

Chairpersons: Nagahiro Saijo, Hiroyuki Mano

91. A Trial of Somatic Gene Targeting In Vivo with An Adenovirus Vector
Ino A., Naito Y., Mizuguchi H., Handa N., Hayakawa T., Kobayashi I.
92. Adenovirus Serotype 35 Vector-Mediated Transduction in Human Hematopoietic Progenitors
Sakurai F., Kawabata K., Yamaguchi T., Hayakawa T., Mizuguchi H.
93. Ablating CAR and Integrins Binding and Fiber Shaft Exchange in Adenovirus Vectors Reduces Tissue Transduction and Toxicity after Systemic Administration
Koizumi N., Kawabata K., Sakurai F., Watanabe Y., Hayakawa T., Mizuguchi H.
94. Tissue Distribution of Transgene Expression Using AAV8-Based Vectors after Intramuscular Injection and Other Routes of Delivery
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