The 17th US-Japan Cellular and Gene Therapy Conference

Chimeric Antigen Receptor T Cells for Cancer Therapy

Natcher Conference Center
Building 45, Room E1/E2, National Institutes of Health
Bethesda, Maryland 20892

Thursday, March 6, 2014

The conference is jointly supported by the Center for Biologics Evaluation and Research (CBER), US Food and Drug Administration (FDA) and the Ministry of Education, Culture, Sports, Science and Technology, Japan under the US-Japan Cooperative Research Program. The goal of the conference is to exchange ideas on cutting edge areas of biomedical research and enhance opportunities for collaborations among scientists from the US and Japan. The scientific theme of our joint annual meetings has been diverse. The invited speakers from Japan and the US will discuss advances in this promising field of immunotherapy of cancers. Treatments using Chimeric Antigen Receptor T cells have generated some remarkable responses in patients with advanced cancer

Seating is limited to 150 attendees and is on a first-come-first-served basis. **No prior registration is required.** Attendance is free and open to the public. No videocast is arranged for the meeting. For information, please contact **S. Rafat Husain** by e-mailing syed.husain@fda.hhs.gov or phone at (301) 827-0475.

PROGRAM

8:30 a.m. – 9:00 a.m.	**Registration** **Coffee and Breakfast**
Moderator	**S. Rafat Husain**, Staff Scientist, Division of Cellular and Gene Therapies, CBER, US Food and Drug Administration, Bethesda, Maryland
9:00 a.m. – 9:05 a.m.	***Opening Remarks*** **Celia Witten,** Director, Office of Cellular, Tissue and Gene Therapies, CBER, US Food and Drug Administration, Rockville, Maryland
9:05 a.m. – 9:10 a.m.	**Yoshikazu Ohya,** Professor, Department of Integrated Biosciences Graduate School of Frontier Sciences, University of Tokyo, Tokyo

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AM Session

Moderators	**Shigeo Koyasu**, Professor, Department of Microbiology and Immunology, Keio University School of Medicine, Tokyo; Head, Laboratory for Immune Cell System, RIKEN Center for Integrative Medical Sciences (IMS), Saitama, Japan

Jonathan Powell, Associate Professor, Oncology, and Pharmacology, Sidney-Kimmel Comprehensive Cancer Center, Johns Hopkins University School of Medicine, Baltimore, Maryland

9:10 a.m. – 9:40 a.m. ***CD19-specific CAR (chimeric antigen receptor)-expressing T-cell therapy for B-cell lymphoma: A preclinical study***
Keiya Ozawa, Professor and Chairman, Division of Hematology, Department of Medicine, Division of Genetic Therapeutics, Center for Molecular Medicine, Division of Immuno-Gene & Cell Therapy (Takara Bio), Jichi Medical University, Tochigi, Japan

9:40 a.m. – 10:10 a.m. **Chemistry, Manufacturing and Control (CMC) aspects of gene modified T cell products: FDA/CBER Experience**
Graeme Price, Staff Scientist, Gene Transfer and Immunogenicity Branch, Division of Cellular and Gene Therapies, CBER, FDA, Bethesda, Maryland

10:10 a.m. – 10:40 a.m. ***Clinical challenges in the regulation of CAR-T cells***
Bindu George, Medical Officer (Team Lead), Division of Clinical Evaluation and Pharmacology and Toxicology, CBER, FDA, Rockville, Maryland

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10:40 a.m. – 11:10 a.m. **Coffee Break**

11:10 a.m. – 11:40 a.m. ***Clinical application of TCR gene-transduced lymphocytes for patients with epitherial cancer or leukemia***
Hiroaki Ikeda, Associate Professor, Department of Immuno-Gene Therapy, Mie University Graduate School of Medicine, Mie, Japan

11:40 a.m. – 12:10 a.m. ***Anti-CD19 chimeric antigen receptors for treatment of B-cell malignancies***
James Kochenderfer, Investigator, Experimental Transplantation and Immunology Branch, Center for Cancer Research, National Cancer Institute, Bethesda, Maryland

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12:10 p.m. – 1:30 p.m. **LUNCH**

PM Session

Moderators **Raj K Puri,** Director, Division of Cellular and Gene Therapies, CBER, FDA, Bethesda, Maryland
Keiya Ozawa, Professor and Chairman, Division of Hematology, Department of Medicine, Division of Genetic Therapeutics, Center for Molecular Medicine, Division of Immuno- Gene & Cell Therapy (Takara Bio), Jichi Medical University, Tochigi, Japan

1:30 p.m. – 2:00 p.m. ***Developing chimeric antigen receptor based therapies for childhood cancer***

Crystal MacKall, Head, Immunology Section, Center for Cancer Research, National Cancer Institute, Bethesda, Maryland

2:00 p.m. – 2:30 p.m. ***Analysis of glypican-3 peptide specific cytotoxic T lymphocyte clones established from patients vaccinated with peptide and development of combination therapy of anti-FITC CAR T cells together with FITC-labeled antitumor Abs***
Tetsuya Nakatsura, Chief, Division of Cancer Immunotherapy, Exploratory Oncology Research & Clinical Trial Center, National Cancer Center Hospital East, Kashiwa Chiba, Japan

2:30 p.m. – 3:00 p.m. ***PiggyBac transposon-mediated cancer immunotherapy***
Yozo Nakazawa, Assistant Professor, Department of Immunology and Pathology, Shinshu University School of Medicine, Nagano

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3:00 p.m. – 3:30 p.m. **Coffee Break**

3:30 p.m. – 4:00 p.m. ***Targeting mTOR signaling and metabolism to regulate T cell activation, differentiation and function***
Jonathan Powell, Associate Professor, Oncology, and Pharmacology, Sidney-Kimmel Comprehensive Cancer Center, Johns Hopkins University School of Medicine, Baltimore, Maryland

4:00 p.m. – 4:30 p.m. ***Bottom-up engineering of cytokine receptors for artificially controlling cell fate***
Masahiro Kawahara, Lecturer, Department of Chemistry and Biotechnology, School of Engineering, University of Tokyo, Tokyo

4:30 p.m. – 5:00 p.m. ***NKT cell-mediated licensing of DCs in vivo***
Shigeo Koyasu, Professor, Department of Microbiology and Immunology, Keio University School of Medicine, Tokyo; Head, Laboratory for Immune Cell System, RIKEN Center for Integrative Medical Sciences (IMS), Saitama, Japan

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Thank you for your participation!

Organizers:

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Cover page: Electron micrograph of T cells (orange in color) attached to a tumor cell.