

Conference Program

Track

01

Therapeutic Antibodies and Beyond

April 9(Thur), 09:30 ~ 17:30 / Room.308

Recently, new innovative approaches using therapeutic antibodies were suggested. This track will concentrate on antibody-drug conjugates, chimeric antigen receptor T-cell therapy, and technologies backing the development of therapeutic antibodies.

SESSION 1. DEVELOPMENT OF ANTIBODY DRUG CONJUGATES

09:30 ~ 11:30

Antibody-drug conjugates (ADCs) are the fastest growing market among the next generation of therapeutic antibodies. The global market for ADC drugs reached \$179 million in 2012 and \$396 million in 2013. The market is estimated to reach \$2.8 billion in 2018. Currently there are two FDA-approved ADCs in market; Brentuximab vedotin (trade name: Adcetris®, marketed by Seattle Genetics and Millennium/Takeda) and Trastuzumab emtansine (trade name: Kadcyla®, marketed by Genentech and Roche). More than 30 ADCs are currently in clinical trials. In this session, up-to-date ADC developments will be presented and discussed.

SESSION CHAIR

Park Youngwoo, Principal Investigator, Aging Intervention Research Center, Korea Research Institute of Bioscience & Biotechnology (KRIBB), Korea

09:30 ~ 10:10

Discovery and Development of Biotherapeutics

Neungseon Seo, Director, R&D, TELA BIO, USA

10:10 ~ 10:50

Technology Platforms as a Business Model for BioTech Companies: The Case of Rottapharm Biotech

Federica Girolami, Head of Department, Business Development and Scientific Liaison, Rottapharm Biotech, Italy

10:50 ~ 11:30

Development of New Complement C5 Neutralizing Antibody

Dongjo Kim, Senior Manager, R&D Divisional Group, Celltrion, Korea

11:30 ~ 13:00

Session Break

SESSION 2. DEVELOPMENT OF CHIMERIC ANTIGEN RECEPTOR T-CELL THERAPY

13:00 ~ 15:00

Recently Chimeric Antigen Receptor T-cell Therapy (CAR-T) has risen as a promising therapeutic tool for immunotherapy against cancer. CAR-T uses the patient's autologous effector T-cells, modifying it with a synthetic receptor and antibodies enabling it to increase the tumor specific immune response. This therapy is expected to first enter market with the launch of CTL019 by Novartis, which was provided with status of 'breakthrough therapy' by FDA, in the next few years. In recent trials, CTL019 has shown complete remission in children with advanced cases of treatment-resistant acute lymphoblastic leukemia (ALL). This session is focused on recent advances and developments of CAR-T.

SESSION CHAIR **Yu-Kyeong Hwang**, Vice President, Cell therapy Research Center, Green Cross Labcell, Korea

Cancer Immunotherapy Utilizing Gene-modified T cells: from the Bench to the Clinic

13:00 ~ 13:40 **Phillip Darcy**, Associate Professor, Department of Oncology, Sir Peter MacCallum cancer centre, University of Melbourne, Australia

Current Trends of Chimeric Antigen Receptor (CAR) Therapy for Cancer

13:40 ~ 14:20 **Sungwoo Cho**, Senior Scientist, Mogam Biotechnology Institute, Green Cross, Korea

A Novel Platform Technology for Universal CAR-T Therapy

14:20 ~ 15:00 **Junho Chung**, Professor, Department of Biochemistry and Molecular Biology, Seoul National University, Korea

15:00 ~ 15:30 Session Break

SESSION 3. TECHNOLOGY DEVELOPMENT FOR THE DEVELOPMENT OF THERAPEUTIC ANTIBODIES

15:30 ~ 17:30

Behind the rapid development of therapeutic antibodies, there was a huge advancement of biological technology. Every step of antibody development such as selecting lead antibodies with optimal characteristics, stably expressing antibodies and designing preclinical studies involve highly technological process. In this session these technologies will be reviewed and discussed in detail.

SESSION CHAIR **Byeong Doo Song**, President, Scripps Korea Antibody Institute, Korea

Developability: Reducing the Risk of Failure of Biotherapeutics

15:30 ~ 16:10 **Yvette Stallwood**, Head, Applied Protein Services, Lonza Biologics plc, UK

Bioanalysis, ADME and PK/PD: Challenges and Strategies for ADC Development

16:10 ~ 16:50 **YoungKun Shin**, Professor, Department of Pharmacology, Chungnam National University, Korea

[Panel Discussion](#)

Byeong Doo Song, President, Scripps Korea Antibody Institute, Korea

Yvette Stallwood, Head, Applied Protein Services, Lonza Biologics plc, UK

16:50 ~ 17:30 **YoungKun Shin**, Professor, Department of Pharmacology, Chungnam National University, Korea

Gyunmin Lee, Professor, Department of Biological Sciences, Korea Advanced Institute of Science and Technology (KAIST), Korea

JongWon Kim, Principal investigator, Division of Drug Screening and Evaluation, Osong New Drug Development Center, Korea