English pages

Non-clinical allergenicity testing: current and future issues.

Jun-ichi Sawada
(Pharmaceuticals and Medical Devices Agency)

Summary

The current (and past) and future issues on non-clinical allergenicity testing methods in Japan were outlined and discussed under the following subtitles: (1) introduction, (2) delayed-type chemical allergy (skin sensitization tests), (3) immediate-type chemical allergy, (4) allergenicity for food additives, (5) allergenicity of food proteins (food allergy), (6) immunogenicity of therapeutic proteins, and (7) conclusion. Most of non-clinical methods are still insufficient, and therefore final allergenicity assessments usually await human epidemiological data. For a substance which has potential allergenicity, case-by-case risk-benefit analysis prior to its marketing and careful post-marketing risk management will be needed.

The 18th Annual Meeting of Japanese Society of Immunotoxicology (JSIT 2011)

September 8-9, 2011

KEYAKI-kaikan (University Hall), Chiba University (Nishi-Chiba campus)
1-33 Yayoi-cho, Inage-ku Chiba, 263-8522 Japan
Organizing Committee of the 18th Annual Meeting of JSIT
http://jsit18.umin.ne.jp
President:Koichi Ueno, Graduate School of Pharmaceutical Sciences, Chiba University
Secretary-general: Katsunori Yamaura, Graduate School of Pharmaceutical Sciences, Chiba University
Phone: +81-43-226-2878 FAX: +81-43-226-2879
e-mail: jsit18-office@umin.ac.jp

Deadline for abstract submissions: June 27, 2011
The theme for this Meeting: "Crosstalk between clinical and experimental immunotoxicology"

Program (Tentative Schedule)

■September 8, 2011 (Thursday)
- Invited Plenary Lecture:
  Dr. Robin L. Thurmond (J & J Pharm R & D, L.L.C. Research Fellow)
- Luncheon Seminar 1:
  Dr. Geneviève Pinard (Charles River Laboratories Preclinical Services Montréal Inc.CANADA)
- Award Lectures:
  Prof. Takemi Yoshida Dr. Ryosuke Nakamura
- Symposium:
  「Food Allergy- From in vitro prediction test to clinical test -」
  Dr. Hiroshi Ohno (RIKEN Yokohama Institute)
  Dr. Haruyo Nakajima Adachi (The University of Tokyo)
  Dr. Yasuto Kondo (Fujita Health University)
  Dr. Gregory Ladics (Du Pont Ag Biotechnology, USA)
- Invited Special Lecture:
  Prof. Chisato Mori (Dept. of Bioenvironmental Medicine, Graduate School of Medicine,Chiba University)
- Oral/Poster presentation
- Social gathering:
  KEYAKI-kaikan (3rd floor, Banquet room)

■September 9, 2011 (Friday)
- Educational Lecture:
  Dr. Nahoko Kaniwa (Division of Medicinal Safety Science, NIHS)
- Luncheon Seminar 2:
  Dr. Christopher Kirton (Huntingdon Life Sciences Ltd., UK)
- Workshop:
  「Methods of Assessment for Developmental Immunotoxicity」
  Dr. Gregory Ladics (Du Pont Ag Biotechnology, USA)
  Dr. Wataru Watanabe (Kyushu University of Health and Welfare)
  Dr. Tin Tin Win Shwe (National Institute for Environmental Studies)
  Dr. Koichi Hayashi (The Institute of Environmental

Toxicology)
・Oral presentation Poster discussion
・Awards Ceremony

Young power for immunotoxicological research

From chromatin to Immunotoxicology

Masamitsu Eitoku
(Department of Environmental Medicine, Kochi Medical School, Japan)

The aim of my graduate studies was to understand multi role of histone chaperone CIA which would be the key factor in chromatin structural change in various nuclear reaction such as transcription, DNA replication, and DNA repair. I supposed that CIA used its different molecular surfaces for interactions with various factors in each reaction to play several roles. So, I produced 90 yeast point mutant strains expressing CIA mutant proteins, which had point mutations in the amino acids located on CIA molecular surface. Then, I performed phenotypic analyses related transcription, DNA replication, and DNA repair. These results were consistent with the results of two kinds of structural analyses performed by my coworkers. One structure was the complex structure of CIA, histone H3 and H4, and the other was the complex structure of CIA and bromodomain of general transcription factor TFIID. Bromodomain was known to recognize acetylated histone, which was famous as one of the epigenetic information in transcriptionally active region. We published two papers getting together these functional and structural results. In these papers, we could succeed to show some models about the molecular mechanism of nucleosome assembly and disassembly, semi-conservative nucleosome replication, and transcription initiation with chromatin template. In the field of immunotoxicology, I am now challenging to show the relationship of epigenetic regulation and lung inflammation caused by exposure to toxic metal fume.