Preface to the Proceedings of the Workshop on Eosinophils in Allergy and Related Diseases 2015

The 29th Workshop on Eosinophils in Allergy and Related Diseases took place October 24th, 2015 at National Center of Sciences in Tokyo. This workshop has been held annually since 1988 under the strong leadership of Prof. Sohei Makino and Prof. Takeshi Fukuda (Dokkyo University), and Prof. Makoto Nagata (Saitama Medical University). It has focused on new insights in the mechanisms of allergy and related diseases such as asthma and allergic rhinitis, as well as basic biology of eosinophils, mast cells, airway epithelial cells, and other cells and molecules essential for the pathophysiology of allergy.

The 2015 Workshop supervised by Koichiro Asano (Tokai University) provided a variety of presentations and discussions that encouraged interaction among pulmonary physicians, pediatricians, otolaryngologists, rheumatologists, gastrointestinal physicians, orthopedic surgeons, and basic scientists. The program was organized into six thematic sessions including 23 presentations, 1) asthma, 2) eosinophilic rhinosinusitis, 3) other eosinophil-related diseases, 4) biology of eosinophils, 5) biology of mast cells and airway epithelial cells, 6) microRNA and airway inflammation, and 7) eosinophilic airway inflammation. In addition, Dr. Makoto Arita (RIKEN IMS) provided a keynote lecture about the metabolism and the role of polyunsaturated fatty acid (PUFA) synthesized in eosinophils on the regulation of allergy and inflammation, and Prof. Masakazu Ichinose (Tohoku University) made an educational lecture about new asthma guideline.

We are pleased to publish the proceedings of this Workshop containing one Review Article representing the keynote lecture, seven Original Articles and five Letters to the Editor, all of which were peer-reviewed and accepted through the review process of Allergology International. We believe that this issue will be of significant importance not only to the members of Japanese Society of Allergology but also to many physicians and researchers around the globe who are interested in allergy.

In the Review Article, Dr. Makoto Arita delivered a new concept that eosinophils can enhance resolution of inflammation and allergy, which is mediated by 12/15-lipoxygenase in eosinophils and its metabolites of PUFA, and dysregulated PUFA metabolism in eosinophils can contribute to the pathogenesis of diseases such as severe asthma. Dr. Arita suggests that further understanding of PUFA metabolism in eosinophils using lipidomics technology would "potentially identify molecular fingerprint of a particular disease for clinical diagnosis and treatment".

The Original Articles and Letters to the Editor dealt with cutting-edge topics in both basic and clinical allergy. Th2 and non-Th2 mechanisms to regulate airway inflammation were demonstrated in the papers by Saeki et al. (Th9), Miyasaka et al. (histamine receptors in central nervous system), Nishimura et al. (CD44), and Gon et al. (secreting extracellular vesicle), and Takaku et al. (eicosanoids). Other papers by Matsukura et al., Koizumi et al., Kobayashi et al., Gon et al., and Noguchi et al. mostly focused on various innate responses in airway epithelial cells (and endothelial cells). There are also two papers written by gastrointestinal physicians (Imaeda et al.) and orthopedic surgeons (Kan et al.). The data presented in these studies collectively covered a wide academic scope and will significantly enhance our insight into the biological properties and/or clinical importance of eosinophils and other inflammatory cells such as mast cells and airway epithelial cells.

Finally, we would like to express our gratitude to the participants and sponsors who helped make this conference possible. Once again, we would like to thank Prof. Nagata for his excellent management, Dr. Soma, Dr. Nakagome, and Ms. Aoyama (Saitama Medical University) for enthusiastic and dedicated supports to coordinate this year’s successful Workshop. We are also sincerely grateful to Ms. Toshiko Takeda of the Editorial Office of Allergology International for her excellent handling of this supplemental issue.

We would like to ask you all keeping in mind that the 2016 Workshop will be held on October 22nd, 2016, in Tokyo under the supervision of Prof. Kohei Yamauchi (Iwate Medical University). We are expecting for even greater number of presentations and attendees. Please check the website for more information at http://www.sec-information.net/eosinophils/data/announce.html. I am looking forward to seeing you there.

Conflict of interest
The author has no conflict of interest to declare.

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