Preface

Since first observed by Wharton Jones in 1846 and named by Paul Ehrlich in 1879, the eosinophil has been the subject of extensive investigation in such eosinophil-related conditions as allergy and parasite infection. Eosinophils are now recognized to play a role in health and disease, with a functional diversity due to multifaceted biological properties. Recent studies have driven dramatic progress in understanding the pathogenesis of, and developing therapeutics for allergic diseases from the aspect of innate and adaptive immune responses orchestrated by a network of T cells, eosinophils, mast cells and tissue structural cells such as epithelial cells. The rapidly increasing prevalence of allergy and the epidemiologic identification of environmental risk factors for the related disease will shed light on gene-environment interactions – which would modify the output of the network – and suggest new avenues of investigation for future studies in this field.

The 23rd Annual Workshop on Eosinophils in Allergy and Related Diseases was held in Tokyo on June 18, 2011, with a special lecture and 25 research presentations in the fields of basic and clinical sciences on allergy and eosinophils. This workshop has provided a forum for interested investigators to discuss recent advances in basic and clinical aspects of the cell biology of eosinophils and other cells and their roles in disease conditions. Topics in the 2011 workshop include the interaction of inflammatory cells with airway structural cells, mechanisms underlying the activation of cells involved in allergic inflammation and the pathogenesis and potential treatment of eosinophil-associated diseases. These proceedings include 10 peer-reviewed original papers, three peer-reviewed case reports, and three review papers. Two abstracts and seven titles, some of which have been submitted or published elsewhere, are also included. We hope that these studies contribute to a better understanding of the pathophysiology and to further development and improvement in the management of allergic and eosinophil-associated diseases.

Finally, we would like to express our sincere appreciation to Novartis Pharma K.K. (Tokyo) for supporting this workshop and to International Medical Publishers, Ltd. (Tokyo) for their excellent assistance in publishing these proceedings.

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