Special Issue

Histamine-Related Molecules as Therapeutic Targets

Message from the Guest Editors

Histamine is known to mediate the induction of various allergic responses via the histamine H1 receptor and gastric acid secretion via H2 receptor. The histamine H3 and H4 receptors also regulate various pathological and physiological responses; consequently, the antagonists/agonists of these receptors are expected to be new medicines. Furthermore, recent basic studies have indicated that various histamine-related molecules, which are involved in histamine production, release, and clearance, adjust the concentration and activity of histamine. These molecules include the histamine-producing enzyme, histidine decarboxylase; the metabolizing enzyme, histamine Nmethyltransferase; and the transporters, monoamine transporter and organic cation transporter 3. In addition. a novel G protein-coupled receptor on mast cells, MASrelated G protein-coupled receptor X2 (MRGPRX2), was reported to be involved in IgE-independent histamine release from mast cells. These molecules will be the therapeutic targets. This special issue of IJMS addresses the current topics in the study of these molecules in basic and clinical research to drive the development of new medicines.

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Message from the Editor-in-Chief

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