

Special Issue

Signaling Pathways That Regulate Cell Proliferation and Apoptosis

Message from the Guest Editor

A fundamental question in the growth of multicellular organisms is how the body knows to stop growing after reaching an adult age. When it comes to humans, in each adult, more than 50 billion cells die and are replaced by other cells every day, which means we change our entire body weight of cells every year. How can this happen? A simple answer is because of cell proliferation and apoptosis. Cell proliferation requires both cell growth and cell division to increase the cell size and population. Apoptosis is a form of programmed cell death which is induced by the inside death events of a cell. Both cell proliferation and apoptosis are required to maintain tissue hemostasis and normal growth.

Therefore, the cell undergoing proliferation or apoptosis is tightly controlled by different biochemical signals. To receive, process, and transduce these signals, the cell develops a variety of cell signaling pathways to help the cell to function normally. However, loss of control of cell proliferation and apoptosis or dysregulation of these signaling pathways leads to a variety of diseases, including cancer.

Guest Editor

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Message from the Editor-in-Chief

Biomedicines (ISSN 2227-9059) is an open access journal devoted to all aspects of research on human health and disease, the discovery and characterization of new therapeutic targets, therapeutic strategies, and research of naturally driven biomedicines, pharmaceuticals, and biopharmaceutical products. Topics include pathogenesis mechanisms of diseases, translational medical research, biomaterial in biomedical research, natural bioactive molecules, biologics, vaccines, gene therapies, cell-based therapies, targeted specific antibodies, recombinant therapeutic proteins, nanobiotechnology driven products, targeted therapy, bioimaging, biosensors, biomarkers, and biosimilars. The journal is open for publication of studies conducted at the basic science and preclinical research levels. We invite you to consider submitting your work to *Biomedicines*, be it original research, review articles, or developing Special Issues of current key topics.

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