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The Interleukin-1 Superfamily: Molecular Mechanisms of Action in Health and Pathology

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Message from the Guest Editor

Dear Colleagues,

The IL-1 superfamily is a group of 11 cytokines that induce a complex network of pro-inflammatory cytokines and, through the expression of integrins on leukocytes and endothelial cells, regulate and initiate inflammatory responses. The IL-1 family of ligands and receptors is primarily associated with acute and chronic inflammation. IL-1 is extensively produced by tissue macrophages, monocytes, fibroblasts, and dendritic cells, but is also expressed by B lymphocytes, NK cells, microglia, and epithelial cells. The IL-1 affects virtually all cells and organs and is a major pathogenic mediator of autoinflammatory, autoimmune, infectious, and degenerative diseases. A better understanding of the pathophysiology of the IL-1 superfamily has the potential to lead to innovative therapeutic tools and targets.

This Special Issue of the International Journal of Molecular Sciences is open to both original research articles and review articles focusing on molecular mechanisms of action IL-1 family members and advances in preclinical evaluation of pharmacologic approaches.









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Message from the Editor-in-Chief

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