

Topical Collection

Cardiovascular Disease: From the Pathogenesis to Novel Therapeutic Approaches

Message from the Collection Editors

Identifying and treating the rupture-prone atherosclerotic plaque remains a challenge for reducing the burden of cardiovascular diseases (CVDs). CVDs, a major cause of mortality in humans, have a complex etiology. Multiple risk factors and pathological mechanisms contribute to this disease, including metabolic perturbations in cardiomyocytes and endothelial cells. Due to new advances in "omics" technologies, metabolomics and its application to cardiovascular diseases continues to evolve rapidly, making it possible to perform new comprehensive tests on metabolites that are crucial in the process of CVD. Despite this, the interconnection of metabolic and inflammatory processes in rupture-prone plaques is poorly understood in humans. Moreover, this topic is written to invite research conducted to investigate the characteristic of cell metabolism related to atherosclerosis progression to implement the development of personalized approaches for their prevention and treatment. The pivotal concept is based on the relationship between cell metabolism, the regulation of immune-metabolic homeostasis, and cardiovascular disease.

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Message from the Editor-in-Chief

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