

## 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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*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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