## **Topical Collection**

# Cardiovascular Disease: From the Pathogenesis to Novel Therapeutic Approaches

#### Message from the Collection Editors

dentifying 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.

#### Collection Editors

Dr. Celestino Sardu

Department of Medical, Surgical, Neurological, Metabolic and Aging Sciences, University of Campania "Luigi Vanvitelli", Piazza Miraglia, 80138 Naples, Italy

Prof. Dr. Raffaele Marfella

Professore Ordinario Medicina Interna, Università degli studi della Campania, Luigi Vanvitelli, Caserta, Italy



an Open Access Journal by MDPI

Impact Factor 3.9 CiteScore 5.2 Indexed in PubMed



mdpi.com/si/120475

Biomedicines
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
biomedicines@mdpi.com

mdpi.com/journal/biomedicines





an Open Access Journal by MDPI

Impact Factor 3.9 CiteScore 5.2 Indexed in PubMed





### About the Journal

#### Message from the Editor-in-Chief

Biomedicines (ISSN 2227-9059) is an open access iournal 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.

#### Editor-in-Chief

#### Prof. Dr. Felipe Fregni

- Neuromodulation Center and Center for Clinical Research Learning, Spaulding Rehabilitation Hospital and Massachusetts General Hospital, Harvard Medical School, Boston, MA 02114, USA
- 2. Department of Epidemiology, Harvard T.H. Chan School of Public Health. Boston. MA 02115. USA

#### **Author Benefits**

#### **High Visibility:**

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, CAPlus / SciFinder, and other databases.

#### Journal Rank:

JCR - Q1 (Pharmacology and Pharmacy) / CiteScore - Q2 (Medicine (miscellaneous))

#### **Rapid Publication:**

manuscripts are peer-reviewed and a first decision is provided to authors approximately 15.3 days after submission; acceptance to publication is undertaken in 3.4 days (median values for papers published in this journal in the first half of 2024).