

Special Issue

Molecular Mechanisms and Therapeutic Targets in Cardiovascular Health and Cardiotoxicity

Message from the Guest Editor

Cardiovascular diseases remain the leading cause of morbidity and mortality worldwide, and the molecular underpinnings of these conditions are under active investigation. This Special Issue aims to provide a platform for high-quality original research and reviews focusing on the molecular mechanisms involved in cardiovascular physiology and pathophysiology, including ischemia, heart failure, arrhythmogenesis, myocardial remodeling, and endothelial dysfunction. We particularly welcome studies elucidating the role of genes, non-coding RNAs, proteins, metabolites, oxidative stress, inflammation, and mitochondrial dynamics in cardiovascular health and disease. Another key area of focus is the molecular basis of cardiotoxicity induced by chemotherapeutic agents, environmental stressors, or novel therapeutic interventions. This Special Issue invites contributions using molecular biology, biochemistry, pharmacology, and omics technologies to uncover new biomarkers, molecular pathways, and potential therapeutic targets in cardiology and cardio-oncology. Studies involving both in vitro and in vivo models, as well as translational approaches with molecular depth, are encouraged.

Guest Editor

Dr. Rui Vitorino

Department of Medical Sciences, Institute of Biomedicine iBiMED,
University of Aveiro, 3810-193 Aveiro, Portugal

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closed (20 May 2026)



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Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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Message from the Editor-in-Chief

The *International Journal of Molecular Sciences (IJMS)* is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, and molecular biophysics. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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