



Mitochondrial Metabolism and Oxidative Stress in Hypertension, Diabetes and Related Complications

Guest Editor:

Prof. Dr. Christian Cortés-Rojó

Instituto de Investigaciones
Químico-Biológicas, Universidad
Michoacana de San Nicolás de
Hidalgo, Morelia, Michoacán,
México

Deadline for manuscript
submissions:

31 October 2024

Message from the Guest Editor

Dear Colleagues,

Alterations in mitochondrial energy metabolism are one of the underlying causes in the development of diabetes and hypertension and its complications. Mitochondrial dysfunction increases the production of reactive oxygen species to deleterious levels and activates various mechanisms that result in tissue damage in both diseases. The dysfunction of mitochondrial energy metabolism in turn negatively alters other processes, further disrupting cellular homeostasis. This Special Issue is devoted to such topics, including (not exclusively) studies on alterations in the mitochondrial metabolic profile, mitochondrial energy metabolism and mitochondrial oxidative stress in diabetes and hypertension. Topics such as the dysregulation of mitochondrial dynamics (fusion/fission), mitochondrial quality control (mitophagy) and cell death (apoptosis, necrosis, ferroptosis) in diabetes and hypertension are also welcome. The therapeutic use of drugs, nutraceuticals and functional foods for the control of these alterations in diabetes and hypertension is also covered.

Prof. Dr. Christian Cortés-Rojó

Guest Editor





an Open Access Journal by MDPI

Editor-in-Chief

Dr. Amedeo Lonardo

1. Formerly Director of the Simple Operating Unit "Metabolic Syndrome", Azienda Ospedaliero-Universitaria, 41126 Modena, Italy
2. Formerly Professor of Internal Medicine, School of Specialization of Allergy and Clinical Immunology, University of Modena and Reggio Emilia, 41121 Modena, Italy

Message from the Editor-in-Chief

The metabolome is the result of the combined effects of genetic and environmental influences on metabolic processes. Metabolomic studies can provide a global view of metabolism and thereby improve our understanding of the underlying biology. Advances in metabolomic technologies have shown utility for elucidating mechanisms which underlie fundamental biological processes including disease pathology. *Metabolites* is proud to be part of the development of metabolomics and we look forward to working with many of you to publish high quality metabolomic studies.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Embase, CAPUS / SciFinder, and other databases.

Journal Rank: JCR - Q2 (*Biochemistry & Molecular Biology*) / CiteScore - Q2 (*Endocrinology, Diabetes and Metabolism*)

Contact Us

Metabolites Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/metabolites
metabolites@mdpi.com
X@MetabolitesMDPI