Special Issue

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

Message from the Guest Editor

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.

Guest Editor

Prof. Dr. Christian Cortés-Rojo
Instituto de Investigaciones Químico-Biológicas, Universidad Michoacana de San Nicolás de Hidalgo, Morelia, Michoacán, México

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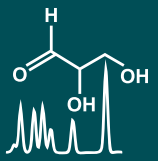
Metabolites
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
metabolites@mdpi.com

mdpi.com/journal/metabolites



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About the Journal

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.

Editor-in-Chief

Dr. Amedeo Lonardo
Internal Medicine, Ospedale Civile di Baggiovara, Azienda Ospedaliero-Universitaria, 41126 Modena, Italy

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