



an Open Access Journal by MDPI

Blood Cells and Redox Homeostasis in Health and Disease

Guest Editors:

Prof. Dr. Angelo D'Alessandro

Department of Biochemistry and
Molecular Genetics, University of
Colorado Denver, Anschutz
Medical Campus, Aurora, CO
80045, USA

Dr. Alkmini T. Anastasiadi

Laboratory of Reliability and
Quality Control in Laboratory
Hematology (HemQcR),
Department of Biomedical
Sciences, School of Health and
Welfare Sciences, University of
West Attica (UniWA), 122 43
Egaleo, Greece

Deadline for manuscript
submissions:

10 July 2024

Message from the Guest Editors

This Special Issue aims to gather contributions that enhance our knowledge regarding the redox-related features of blood components and the impact of blood redox disequilibrium on pathophysiological backgrounds. Potential topics include, but are not limited to, the following:

- Oxidative stress and hematopoiesis;
- Blood redox parameters in disease states;
- Oxidation and antioxidant systems in mitochondria-devoid, iron and oxygen-loaded red blood cells;
- Role of oxidative stress and redox systems in platelet activation and coagulopathy;
- Role of hypoxia in mitochondrial oxidant stress in the etiopathology of diseases;
- Role of iatrogenic (e.g., blood storage; extracorporeal membrane oxygenation) or other exposures (e.g., exercise, smoking, etc.) in oxidant stress generation and mitigation in blood cells;
- Effect of xenometabolites (including bacterial metabolites or drugs, e.g., common chemotherapeutic agents) on blood cell redox status;
- Redox therapies, including novel drug delivery systems;
- Role of aging and inflammation in blood cell oxidant stress.



mdpi.com/si/170229

Special Issue



an Open Access Journal by MDPI

Editor-in-Chief

**Prof. Dr. Alessandra
Napolitano**

Department of Chemical
Sciences, University of Naples
"Federico II", Via Cintia 4, I-80126
Naples, Italy

Message from the Editor-in-Chief

It has been recognized in medical sciences that in order to prevent adverse effects of "oxidative stress" a balance exists between prooxidants and antioxidants in living systems. Imbalances are found in a variety of diseases and chronic health situations. Our journal *Antioxidants* serves as an authoritative source of information on current topics of research in the area of oxidative stress and antioxidant defense systems. The future is bright for antioxidant research and since 2012, *Antioxidants* has become a key forum for researchers to bring their findings to the forefront.

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, FSTA, PubAg, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q1 (*Food Science & Technology*) / CiteScore - Q1 (*Food Science*)

Contact Us

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

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

mdpi.com/journal/antioxidants
antioxidants@mdpi.com
[X@antioxidants_OA](https://twitter.com/antioxidants_OA)