Special Issue

Oxidative Stress in Red Blood Cells

Message from the Guest Editors

Red blood cells (RBCs) are unique and highly specialized cells involved in respiratory gas transportation and highly susceptible to oxidative damage, they are equipped with effective anti-oxidative systems providing them with antioxidant protection, along with protection for body tissues and organs. When oxidants are produced in excess or when the antioxidant defences are ineffective, the resulting oxidative condition causes both biochemical and biophysical deleterious effects, e.g., disruption in the bilayer molecular arrangement, changes in morphology and mechanics, thus compromising RBC homeostasis, which may correlate with the development of oxidative-stress-related diseases. This Special Issue will focus on the molecular mechanisms underlying the cell redox endogenous system and oxidative stress (OS) in RBCs, with specific regard to the OS impact on cellular components, including membrane ion transport systems. The aim is also to provide more information about cell response to OS in human pathologic conditions, mainly in those displaying systemic OS as a hallmark, and its possible modulation by novel antioxidant strategies.

Guest Editors

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Deadline for manuscript submissions

closed (20 April 2025)

Antioxidants

an Open Access Journal by MDPI

Impact Factor 6.6
CiteScore 12.4
Indexed in PubMed

mdpi.com/si/176196

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About the Journal

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.

Editor-in-Chief

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