Special Issue

Redox Regulation in COPD: Therapeutic Implications of Antioxidants

Message from the Guest Editor

Redox regulation is pivotal in the pathogenesis of chronic obstructive pulmonary disease (COPD) and related conditions, including asthma, emphysema, chronic bronchitis, bronchiectasis, and fibrosis. Oxidative stress, arising from an imbalance between oxidants and antioxidants, can induce chronic inflammation, tissue damage, and disease progression. Experimental studies in animal models and clinical trials in patients have investigated the therapeutic potential of natural and synthetic antioxidants in mitigating oxidative stress and modulating redox pathways. The findings suggest benefits in reducing exacerbations, improving lung function, and attenuating fibrotic processes; however, challenges pertaining to bioavailability and dosing persist. This Special Issue invites authors to submit original research or literature reviews addressing redox regulation in pulmonary diseases, focusing on molecular mechanisms, experimental models, or clinical interventions with antioxidants. Contributions exploring novel therapeutic strategies or elucidating current limitations are particularly encouraged, aiming to advance knowledge on and the treatment of these debilitating conditions.

Guest Editor

Dr. Samuel Santos Valença
Instituto de Ciências Biomedicas, Universidade Federal do Rio Janeiro, Rio de Janeiro 21941-590, RJ, Brazil

Deadline for manuscript submissions

31 October 2025

Antioxidants

an Open Access Journal by MDPI

Impact Factor 6.6
CiteScore 12.4
Indexed in PubMed

mdpi.com/si/238719

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

mdpi.com/journal/antioxidants

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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

Prof. Dr. Alessandra Napolitano
Department of Chemical Sciences, University of Naples "Federico II", Via Cintia 4, I-80126 Naples, Italy

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