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

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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.

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