

## Special Issue

# Oxidative Stress in Health and Disease

### Message from the Guest Editor

Oxidative stress is caused by an imbalance between the production of oxygen reactive species (ROS), such as superoxide radicals ( $O_2^{\bullet-}$ ), hydrogen peroxide ( $H_2O_2$ ), hydroxyl radicals ( $\bullet OH$ ), and singlet oxygen ( $^1O_2$ ), and the ability to neutralize them. The accumulation of ROS leads to cellular damage in metabolism processes, negatively affecting several cellular structures and molecules, such as DNA, lipids, and proteins; this can trigger cell inflammation, apoptosis and necrosis, peroxidation, chromosomal aberration, and damage to lipoproteins, membranes, DNA, collagen structure and mitochondrial function. New therapeutic approaches targeting oxidative stress and its signaling molecules could provide the means to treat various human diseases. This Special Issue of *Biomedicines*, "Oxidative Stress in Health and Disease", aims to compile original research papers and cover new literature data and insights on the pathogenesis, molecular pathways and beneficial effects of novel and safe treatments of oxidative stress.

### Guest Editor

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### Deadline for manuscript submissions

31 December 2025



## Biomedicines

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### Message from the Editor-in-Chief

*Biomedicines* (ISSN 2227-9059) is an open access journal devoted to all aspects of research on human health and disease, the discovery and characterization of new therapeutic targets, therapeutic strategies, and research of naturally driven biomedicines, pharmaceuticals, and biopharmaceutical products. Topics include pathogenesis mechanisms of diseases, translational medical research, biomaterial in biomedical research, natural bioactive molecules, biologics, vaccines, gene therapies, cell-based therapies, targeted specific antibodies, recombinant therapeutic proteins, nanobiotechnology driven products, targeted therapy, bioimaging, biosensors, biomarkers, and biosimilars. The journal is open for publication of studies conducted at the basic science and preclinical research levels. We invite you to consider submitting your work to *Biomedicines*, be it original research, review articles, or developing Special Issues of current key topics.

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### Editor-in-Chief

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