

Special Issue on

Modulation of Redox Signaling in Chronic Diseases and Regenerative Medicine

CALL FOR PAPERS

In the last decades, major advances in therapeutic strategies for chronic diseases have significantly reduced death rates. Redox signaling is being implicated in the pathophysiology of such diseases, affecting most organs. Proliferation of cancer cells, damage to cardiomyocytes and vascular cells, exacerbation of inflammation are just a few examples of events importantly controlled by reacting oxygen species (ROS). Physiologic levels of ROS act as signaling molecules and modulate healthy functions, while high levels of ROS can derange the homeostasis of most organs and systems in our body. Hence, fine-tuning the complexity of redox signaling is a very up-to-date field of research.

We invite authors to contribute original research articles that illustrate and stimulate the growing efforts to understand the implication of redox signaling in chronic diseases, such as cancer, inflammatory diseases, and cardiovascular diseases, as well as review articles that describe the current state of the art.

We are interested in articles describing new molecular players of oxidative stress as well as new approaches to manipulate ROS-driven processes for the treatment of these diseases and for the advancement of regenerative and rejuvenation approaches.

Potential topics include but are not limited to the following:

- ▶ Role of oxidative stress in cancer, including redox-mediated pathways that promote proliferation and potential therapeutic implications in cancer therapy
- ▶ Role of oxidative stress in anticancer drug-induced cardiotoxicity, including cardiac dysfunction, but also myocardial ischemia, arrhythmias, thromboembolism, arterial and pulmonary hypertension, and peripheral arterial occlusive disease
- ▶ Role of oxidative stress in cardiovascular disease, not limited to ischemic heart disease, but also in hypertrophy and heart failure, valvular heart disease, cardiac aging and rejuvenation, cardiopulmonary diseases, including pulmonary hypertension
- ▶ Role of ROS signaling in the recruitment of inflammatory cells and modulation of inflammation in immunologic and rheumatologic diseases
- ▶ Identification of new signaling pathways/players implicated in ROS production in the healthy state and in the pathophysiology of the above-mentioned diseases
- ▶ Identification of new potential tools to manipulate oxidative signaling for therapeutic purposes in the treatment of these diseases

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Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/omcl/mrsc/>.

Papers are published upon acceptance, regardless of the Special Issue publication date.