



Oxidative Medicine and Cellular Longevity

Special Issue on **Oxidative Stress and Platelet Biology in Cardiovascular Surgeries**

CALL FOR PAPERS

In this special issue the authors are invited to submit their original research articles that investigate key questions in the field of oxidative stress and modulation of platelet functionality related to clinical complications after cardiovascular surgeries. The original research articles in this issue will provide important information regarding novel aspects of balance between reactive oxygen species (ROS) and antioxidant defense-mediated signaling related to platelet functionality, which have important implications in physiological and pathophysiological cardiovascular processes before, during, and after surgeries with or without biomedical device implantation. The issue also included a number of review articles that highlight areas of intense research in the fields of free radical, platelet biology, and cardiovascular medicine.

The purpose of the topic is to assemble information from *in vitro* and/or *in vivo* animal as well as human studies in order to provide an additional opportunity to identify oxidative stress related molecular mechanisms of platelet dysfunctionality involved in the pathogenesis of diverse clinical complications related to cardiovascular surgeries. We are particularly interested in the high quality original articles highlighting new aspects of oxidative medicine related to platelet biology in modulating clinical complications in cardiovascular surgeries.

Potential topics include, but are not limited to:

- ▶ Role of oxidative stress and platelet receptors in cardiovascular disease
- ▶ Role of oxidative stress in mediating platelet apoptosis during cardiac failure
- ▶ Biomedical device mediated change in oxidative stress among heart failure patients
- ▶ Immune inflammation, infection, and oxidative stress after cardiac surgery
- ▶ Role of oxidative stress and platelets in stroke following cardiac surgery
- ▶ Role of shear stress on platelet function and oxidative stress
- ▶ Mechanistic insight of oxidative stress and platelet biology during bleeding after cardiac surgery
- ▶ Role of antiplatelet drugs in modulating oxidative stress during cardiac surgery

Authors can submit their manuscripts via the Manuscript Tracking System at <http://mts.hindawi.com/submit/journals/omcl/ospb/>.

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First Round of Reviews

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