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## Role of Oxidative Stress, Metabolic and Inflammatory Processes in Platelet Activation: A Contribution from the Italian Study Group on Platelets (GSP)

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Deadline for manuscript submissions:

**closed (30 September 2024)**

### Message from the Guest Editors

The main role of platelets is to control bleeding and repair vascular damage via thrombosis. Platelets are implicated in atherosclerotic complications such as myocardial infarction, stroke and peripheral arterial disease. Recently, platelets activation has also been studied in other diseases. For example, platelets have also been implicated in tumor metastasis through platelet–tumor cell interactions. There are several mechanisms that promote platelet activation. Oxidative stress is one that plays a pivotal role in platelet activation. Several enzymes that produce reactive oxidant species, such as nicotinamide adenine dinucleotide phosphate (NADPH) oxidase, myeloperoxidase and uncoupled nitric oxide synthase, determine a pro-inflammatory status that could interact with other immune cells and secrete various biochemical mediators to promote several diseases, such as cancer and neurodegenerative disease.

This Special Issue aims to analyze the pathophysiological role of platelet activation in several diseases. We intend to collect papers which investigate the mechanisms associated with platelet activation in relation to oxidative stress, metabolic and inflammatory processes.



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## 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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