Special Issue

Oxidative Stress and Inflammation in Cancer Biology

Message from the Guest Editors

Oxidative stress, characterized by an imbalance between ROS production and antioxidant defenses, leads to cellular damage that contributes to carcinogenesis. The resulting oxidative damage affects DNA, proteins, and lipids, promoting mutations and oncogenic transformations. Inflammation, often driven by oxidative stress, is a crucial factor in the development and progression of cancer. Chronic inflammation creates a tumor-promoting environment by supporting cellular proliferation, survival, and metastasis. This Special Issue compiles significant research on how oxidative stress and inflammation interconnect in the context of cancer biology. It highlights the potential of antioxidants in modulating these processes and their therapeutic implications. The articles cover a range of topics, from basic molecular mechanisms to translational and clinical research, providing a comprehensive understanding of the role of oxidative stress and inflammation in cancer biology. Through these contributions, this Special Issue aims to provide new insights into the molecular mechanisms of cancer, potentially leading to the development of therapeutic strategies and improved patient outcomes.

Guest Editors

Dr. Jorge Sastre-Serra

1. Grupo Multidisciplinar de Oncología Traslacional, Institut Universitari d'Investigació en Ciències de la Salut (IUNICS), Universitat de les Illes Balears, Palma, Illes Balears, Spain
2. Instituto de Investigación Sanitaria de las Islas Baleares (IdISBa), Hospital Universitario Son Espases, Edificio S, Palma, Illes Balears, Spain
3. CIBER Fisiopatología Obesidad y Nutrición, Instituto Salud Carlos III, Madrid, Spain

Dr. Mercedes Nadal-Serrano

1. Grupo Multidisciplinar de Oncología Traslacional, Institut Universitari d'Investigació en Ciències de la Salut (IUNICS), Universitat de les Illes Balears, Palma, Illes Balears, Spain
2. Instituto de Investigación Sanitaria de las Islas Baleares (IdISBa), Hospital Universitario Son Espases, Edificio S, Palma, Illes Balears, Spain

Deadline for manuscript submissions

closed (28 February 2026)

Antioxidants

an Open Access Journal by MDPI

Impact Factor 6.6
CiteScore 12.4
Indexed in PubMed

mdpi.com/si/209475

Antioxidants
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
antioxidants@mdpi.com

mdpi.com/journal/antioxidants

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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.

Editor-in-Chief

Prof. Dr. Alessandra Napolitano
Department of Chemical Sciences, University of Naples "Federico II", Via Cintia 4, I-80126 Naples, Italy

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