

Special Issue

Oxidative Stress, Classification and Quantitation

Message from the Guest Editor

Oxidative stress (OS) is an ill-defined term, being dependent on the method used to evaluate it. Specifically, different biomarkers may reflect different manifestations of the OS or different types of OS. We hypothesize that several types of OS exist. This conclusion accords with the proposal of Halliwell and Gutteridge. These authors proposed that “chemistries of different ROS entities are distinct”. This means that OS can be divided into subgroups with different ROS (“types of OS”). Given the very large number of oxidants and the huge differences between the reactivity of different targets, the concentration of a single biomarker cannot be expected to give an answer to the overall capacity of an individual to resist oxidative damage and cannot be of diagnostic value. Another important aspect of the specific type of OS is that it may be relevant to the prevailing hypothesis that high-risk groups benefit most from antioxidant interventions. Altogether, as long as we do not know the pathophysiological meaning of the different types of OS, the search for improved methods of quantifying OS is of limited applied value.

Guest Editor

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Deadline for manuscript submissions

closed (31 August 2020)



Antioxidants

an Open Access Journal
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Impact Factor 6.6
CiteScore 12.4
Indexed in PubMed



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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.

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