

Special Issue

Recent Advances of Oxidative Stress and Inflammation in Diabetes

Message from the Guest Editors

The pathological progression of diabetes mellitus is intimately connected to the formation and activation of oxidative stress (OS).

OS is a consequence of the redox system disturbance characterized by a notably increased production of reactive oxygen species (ROS).

ROS plays a central role in the interactions involving inflammation and metabolic control. Hyperglycemia, through various mechanisms, leads to increased ROS production and chronic inflammation. The excessive production of ROS can feedback and contribute to the pathogenesis of insulin resistance and impaired insulin secretion. Endogenous antioxidant defense systems help to reduce deleterious ROS. Antioxidant enzymes can accelerate the breakdown of ROS, while the non-enzyme antioxidants can capture and eliminate free radicals. The purpose of this Special Issue is to highlight the research advances regarding the interactions between oxidative stress and inflammation in diabetes. Our goal is to provide research papers and reviews related to endogenous and external antioxidant defense systems and to present modern therapeutic strategies in the treatment of DM.

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About the Journal

Message from the Editorial Board

Cells has become a solid international scientific journal that is now indexed on SCIE and in other databases. We have successfully introduced a special issues format so that these issues serve as mini-forums in specific areas of cell science. *Cells* encourages researchers to suggest new special issues, serve as special issues editors, and volunteer to be reviewers. Our main focus will remain on cell anatomy and physiology, the structure and function of organelles, cell adhesion and motility, and the regulation of intracellular signaling, growth, differentiation, and aging. We are open to both original research papers and reviews.

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