



Oxidative Medicine and Cellular Longevity

Special Issue on **Oxidative Stress in Metabolic Disorders: Pathogenesis, Prevention, and Therapeutics**

CALL FOR PAPERS

Metabolic disorders involve disruption of normal metabolic processes and energy disbalance leading to many pathophysiological changes including obesity, dyslipidaemia, diabetes, and cardiovascular disease collectively termed as metabolic syndrome. Obesity is also linked with increased risks of cancers. Recent studies suggest that metabolic syndrome is associated with increased oxidative stress, which may be at the core of developing cellular dysfunction and associated disorders. Oxidative stress emanates from loss of balance between the generation and scavenging of reactive oxygen species (ROS) which leads to oxidative modifications of biomolecules including lipids, carbohydrates, proteins, and nucleic acids. The damaged biomolecules, being highly reactive, can further promote cell and tissue dysfunction leading to pathogenesis. The emerging correlation between oxidative stress and metabolic disorders is important to understand which may lead to identification of novel biomarkers, molecular targets, and drug designing for prevention and therapeutic intervention. Recent advancement in the understanding of oxidative damages to cells has provided better tools which may be helpful in unravelling the intricate relationship between oxidative stress and metabolic disorders. The current intensive research in this area is yielding novel findings which must be presented and consolidated to enhance the overall understanding.

We invite investigators and scholars to contribute original research paper and review article in our special issue in the following subarea of “oxidative stress in metabolic disorders.”

Potential topics include, but are not limited to:

- ▶ Redox imbalance, metabolic disorders, and signalling mechanisms
- ▶ Mechanisms of production and types of reactive species in metabolic disorders
- ▶ Intricate link between inflammation, oxidative stress, and metabolic disorders
- ▶ Mitochondrial oxidative stress in metabolic disorders
- ▶ Interplay between oxidative stress, endoplasmic reticulum (ER) stress, and metabolic disorders
- ▶ Novel molecular targets with translational potential
- ▶ Novel and relevant disease models to study oxidative stress mechanisms in metabolic disorders
- ▶ Preventive and therapeutic agents/drugs
- ▶ Technical advancements for investigating oxidative stress induced metabolic disorders

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

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