



## Therapeutic Advances in Mitochondrial Dysfunction and Oxidative Stress in Chronic Diseases

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### Message from the Guest Editors

Mitochondria are one of the most important organelles that mediate cellular homeostasis. Mitochondria are the major source of ROS (reactive oxygen species) production. Oxidative stress is often characterized by the excessive ROS production, which causes several cellular alterations including mitochondrial dysfunction. Accumulating evidence suggests that oxidative stress and mitochondrial dysfunctions play a major role in the pathogenesis of various chronic diseases in peripheral tissues such as the lung, kidney, and other vital organs. The usage of antioxidants in treating various chronic diseases is well known and widely studied across the scientific community. Recent advances in targeted therapeutics (specifically mitochondrial therapeutics) have helped to understand the key role played by mitochondria in health and diseases. Mitochondrial-based theranostics (therapy and diagnostics) are of immense interest and are ever-growing in recent years. This Special Issue is aimed to understand and update the recent advancements in the area of “mitochondrial dysfunction and oxidative stress” in various chronic diseases. We look forward to receiving your contributions.





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