Special Issue

Updates on Mitochondria and Cancer

Message from the Guest Editors

Mitochondria play a key role in cancer, and their involvement is not limited to ATP production. Mitochondria also produce reactive oxygen species and building blocks to support rapid cell proliferation. Metabolic reprogramming in cancer cells occurs through the modulation of mitochondrial metabolic pathways and changes in mitochondrial homeostasis (biogenesis, mitophagy, dynamics, redox balance, and protein homeostasis). A deeper understanding of altered mitochondrial pathways in cancer may provide new opportunities to identify potential therapeutic targets. In addition, several studies have shown that mitochondria are also involved in cancer drug resistance. Finally, the analysis of mitochondrial markers in cancer tissues and body fluids may provide a tool for early cancer diagnosis and the monitoring of disease progression. Thus, this Special Issue will focus on altered mitochondrial pathways in cancer, new strategies/compounds that may induce cancer cell death by altering mitochondrial function, mitochondria and cancer drug resistance, and mitochondrial markers as new diagnostic/prognostic tools.

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Biomolecules is a multidisciplinary open-access journal that reports on all aspects of research related to biogenic substances, from small molecules to complex polymers. We invite manuscripts of high scientific quality that pertain to the diverse aspects relevant to organic molecules, irrespective of the biological question or methodology. We aim for a competent, fair peer review and rapid publication. Please look at some of the exciting work that has been published in *Biomolecules* so far. We would be delighted to welcome you as one of our authors.

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