

## Special Issue

# Metabolic and Lipidomic Reprogramming in Cancer: Mechanisms and Therapeutic Potential

### Message from the Guest Editors

Cancer cells undergo metabolic and lipidomic reprogramming to sustain proliferation, evade apoptosis, and adapt to changing microenvironments. These alterations reflect a fundamental rewiring of cellular energetics and biosynthetic pathways that directly contribute to malignancy. Recent advances in metabolomic and lipidomic technologies have revealed that shifts in energy metabolism, lipid synthesis and degradation, and signaling pathways are pivotal drivers of oncogenesis and disease progression. This Special Issue focuses on how cancer cells reconfigure their metabolic and lipid profiles in response to genetic, environmental, and therapeutic factors. We welcome research and reviews using metabolomics and lipidomics, including stable isotope tracers, to explore key cancer pathways. Emphasis is on studies investigating metabolic changes due to drug treatments, nutrient availability, and stressors. The goal is to highlight altered metabolic and lipidomic pathways in cancer and support precision oncology through the discovery of diagnostic markers and therapeutic targets.

### Guest Editors

Dr. Sara Vicente-Muñoz

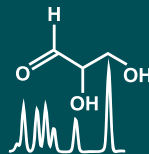
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### Deadline for manuscript submissions

31 December 2025



## Metabolites

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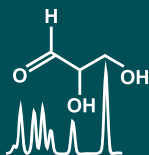
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## About the Journal

### Message from the Editor-in-Chief

The metabolome is the result of the combined effects of genetic and environmental influences on metabolic processes. Metabolomic studies can provide a global view of metabolism and thereby improve our understanding of the underlying biology. Advances in metabolomic technologies have shown utility for elucidating mechanisms which underlie fundamental biological processes including disease pathology. *Metabolites* is proud to be part of the development of metabolomics and we look forward to working with many of you to publish high quality metabolomic studies.

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### Editor-in-Chief

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manuscripts are peer-reviewed and a first decision is provided to authors approximately 14.4 days after submission; acceptance to publication is undertaken in 3.6 days (median values for papers published in this journal in the first half of 2025).