# Special Issue

# Targeting Metabolic Vulnerabilities to Selectively Eliminate Cancer Cells

## Message from the Guest Editors

Cancer cells undergo biochemical and physiological changes acquiring malignancy. Signaling and metabolic pathways are modified to support continuous and uncontrollable cell division. Cancer-associated metabolic alterations include Warburg effect, elevated lactate production, increased glutamine metabolism, fatty acid synthesis, and reduced fatty acid oxidation. Metabolic reprogramming in cancer cells is partially associated with altered epigenetic regulation of oncogenes and tumor suppressor genes through acetylation and methylation. While providing benefits for rapidly dividing cancer cells by satisfying nutrient demand and modulating tumor microenvironment metabolites, metabolic reprogramming creates vulnerabilities targetable to eliminate cancer cells without harming non-cancerous cells.

This Special Issue of Cells considers cancer-specific metabolic and physiological vulnerabilities' potential in novel cancer treatment strategies. We welcome original research, reviews and perspectives on recent progress in exploiting cancer cell vulnerabilities, enhance therapeutics and patient outcomes.

## Guest Editors

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## Deadline for manuscript submissions

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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.

## Editors-in-Chief

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manuscripts are peer-reviewed and a first decision is provided to authors approximately 16 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the first half of 2025).