

## Special Issue

# Advancing Breast Cancer Research: Multi-Omics, AI, and Emerging Cellular Mechanisms

### Message from the Guest Editors

Breast cancer remains the most common malignancy in women worldwide. Recent advances in multi-omics, single-cell and spatial technologies, and AI have uncovered distinctive tumor subtypes and clarified the complexity of the tumor microenvironment. Despite progress in targeted therapies, major challenges—including therapeutic resistance, immune evasion, and limited options for aggressive subtypes such as TNBC—continue to drive fundamental research needs. This Special Issue welcomes studies focused on molecular mechanisms, cellular dynamics, and innovative technological approaches that advance our understanding of breast cancer biology. We particularly encourage work examining tumor heterogeneity, cancer stem cell properties, cell plasticity, and key signaling pathways regulating growth, invasion, and resistance. Submissions exploring next-generation biomarkers, regulatory non-coding RNAs, and immune landscape features that shape tumor progression are also of high interest.

### Guest Editors

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### Deadline for manuscript submissions

30 April 2026



## Cells

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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.

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### Editors-in-Chief

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