

Special Issue

Molecular Advances and Views in Triple-Negative Breast Cancer

Message from the Guest Editor

Triple-negative breast cancer (TNBC) is a highly challenging breast cancer subtype, comprising 15–20% of all cases, with higher impact on younger women and specific ethnic groups. Lacking estrogen receptor, progesterone receptor, and HER2 amplification, it cannot benefit from standard targeted therapies. Cytotoxic chemotherapy has long been the mainstay, but recent molecular and translational progress is transforming its therapeutic landscape.

Genomic/transcriptomic profiling has revealed TNBC's heterogeneity. Subtyping into basal-like, mesenchymal, immunomodulatory, and luminal androgen receptor (LAR) subtypes offers a molecular framework to understand its diverse biology and therapeutic vulnerabilities, guiding biomarker discovery and enabling precision medicine. This editorial highlights recent molecular insights into TNBC, emphasizes how these advances reshape therapeutic strategies, and provides perspectives on future research and clinical management directions. Research areas may include (but are not limited to): emerging therapeutic targets; biomarker development and precision oncology; future perspectives. We look forward to receiving your contributions.

Guest Editor

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Deadline for manuscript submissions

28 February 2026



International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



mdpi.com/si/252919

*International Journal of
Molecular Sciences*
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Message from the Editor-in-Chief

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