

Special Issue

Recent Advances in Tumor Microenvironment Responsive Formulations and Delivery Systems for Anticancer Therapy

Message from the Guest Editor

Recent years have seen rapid progress in tumor microenvironment (TME) responsive formulations that convert hallmark TME features into actionable triggers for selective delivery and activation. We concentrate on TME triggers such as pH, redox and ROS, hypoxia, and enzymes, and on formulation and delivery platforms that are experimentally and translationally grounded. In this Special Issue, original research articles and reviews are welcome. Research areas may include (but are not limited to) the following:

- pH responsive drug release and tumor activated formulations;
- Redox- or ROS-triggered delivery systems for improved tumor selectivity;
- Enzyme responsive carriers and prodrugs for cancer therapy;
- TME-guided delivery for immunotherapy and combination therapy;
- Beyond nanoparticles: hydrogels, depots, implants, microneedles, and local or regional delivery;
- Approaches to improve tumor penetration and intratumoral distribution, including stroma and ECM focused strategies;
- How to evaluate performance: biodistribution, imaging, tumor penetration assays, and PK/PD links.

I look forward to receiving your contributions.

Guest Editor

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Deadline for manuscript submissions

30 November 2026



Pharmaceutics

an Open Access Journal
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Impact Factor 5.5

CiteScore 10.0

Indexed in PubMed



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