

Special Issue

Nanoparticle-Mediated Immunotherapy: Reshaping the Tumor Microenvironment for Enhanced Cancer Treatment

Message from the Guest Editor

The tumor microenvironment (TME) constitutes a significant obstacle to effective cancer treatment, characterized by conditions such as hypoxia, acidosis, elevated interstitial fluid pressure, and immunosuppressive factors. Nanomedicine, which involves the application of nanotechnology in medicine, offers a promising approach to addressing the complexities of the TME.

This Special Issue is dedicated to the latest advancements in nanomedicine strategies that effectively navigate the tumor microenvironment (TME) to enhance drug delivery and therapeutic outcomes in cancer treatment. The exploration of this topic is structured around three principal sub-categories: 1. Tumor-targeting approaches: These strategies employ nanoparticles to selectively deliver drugs to tumor cells by utilizing specific ligands or physical cues. 2. Local treatments: Nanomedicine platforms are engineered for intra- or peritumoral injection to achieve elevated local drug concentrations while minimizing systemic side effects. 3. Systemic immunotherapy approaches: This involves the use of nanoparticles to remodel the TME, counteract immunosuppression, and augment systemic immune responses.

Guest Editor

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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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