

Special Issue

New Insights into the Tumor Microenvironment: Mechanisms and Therapeutic Strategies

Message from the Guest Editor

The tumor microenvironment (TME) plays a pivotal role in shaping cancer initiation, progression, therapeutic resistance, and patient outcomes. Recent advances in single-cell sequencing, spatial transcriptomics, and multi-omics profiling have uncovered the remarkable heterogeneity and adaptability of the TME, opening new avenues for biomarker discovery and therapeutic intervention. This Special Issue seeks to highlight cutting-edge research that enhances our understanding of TME biology and its translational implications. We welcome original research, reviews, and perspectives addressing mechanisms of immune evasion, tumor-immune crosstalk, metabolic and epigenetic regulation, stromal remodeling, and therapy-induced TME alterations. Particular attention will be given to studies investigating pharmacological interventions. Contributions that integrate multi-omics technologies, propose TME-based prognostic models, or explore novel immunotherapeutic and combinatorial strategies are especially encouraged. This Special Issue aims to advance precision oncology and accelerate the translation of TME research into innovative therapeutic opportunities.

Guest Editor

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Message from the Editor-in-Chief

Biomedicines (ISSN 2227-9059) is an open access journal devoted to all aspects of research on human health and disease, the discovery and characterization of new therapeutic targets, therapeutic strategies, and research of naturally driven biomedicines, pharmaceuticals, and biopharmaceutical products. Topics include pathogenesis mechanisms of diseases, translational medical research, biomaterial in biomedical research, natural bioactive molecules, biologics, vaccines, gene therapies, cell-based therapies, targeted specific antibodies, recombinant therapeutic proteins, nanobiotechnology driven products, targeted therapy, bioimaging, biosensors, biomarkers, and biosimilars. The journal is open for publication of studies conducted at the basic science and preclinical research levels. We invite you to consider submitting your work to *Biomedicines*, be it original research, review articles, or developing Special Issues of current key topics.

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