



Advances in Tumor Microenvironment and Metabolism

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Deadline for manuscript
submissions:

closed (30 June 2023)

Message from the Guest Editor

Dear Colleagues,

The tumor microenvironment has profound effects on cancer development, progression, and treatment response. Cancer cells coexist with infiltrated immune cells, blood vessels, fibroblasts, and other stromal cells in the tumor microenvironment. Additionally, the biochemical and biophysical properties of the tumor microenvironment are different from those of normal tissue. Several features of the tumor microenvironment have been identified, including hypoxia, acidosis, high interstitial fluid pressure, and increased extracellular matrix (ECM) stiffness. The metabolism of cancer cells is reprogrammed from that of normal cells. The glycolytic metabolism of cells produces lactic acid, which, after being excreted by cancer cells, can acidify the tumor microenvironment. Additionally, tumor-associated hypoxia can lead to rapid cancer growth, and defective vascular perfusion can further increase cellular glycolysis as well as lactate production and accumulation in the tumor microenvironment. Cancer cell metabolism is being exploited as a target for cancer therapy. This Special Issue will address several aspects of the tumor microenvironment and metabolism.





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Message from the Editor-in-Chief

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