Special Issue

Advances in Tumor Microenvironment and Metabolism

Message from the Guest Editor

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 cacti 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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The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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