



Advances in Tumor Microenvironment and Metabolism

Guest Editor:

Dr. Ju-Ock Nam

Department of Food Science and
Biotechnology, Kyungpook
National University, Daegu 41566,
Republic of Korea

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 cancer 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.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Maurizio Battino

Department of
Odontostomatologic and
Specialized Clinical Sciences,
Sez-Biochimica, Faculty of
Medicine, Università Politecnica
delle Marche, Via Ranieri 65,
60100 Ancona, Italy

Message from the Editor-in-Chief

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, PMC, MEDLINE, Embase, CAPus / SciFinder, and other databases.

Journal Rank: JCR - Q1 (*Biochemistry & Molecular Biology*) / CiteScore - Q1 (*Inorganic Chemistry*)

Contact Us

*International Journal of Molecular
Sciences* Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/ijms
ijms@mdpi.com
X@IJMS_MDPI