

Special Issue

Targeting Autophagy Pathways for Cancer Treatment

Message from the Guest Editor

Autophagy is a double-edged sword in cancer, acting as a tumor suppressor in the early stages and a promoter in established cancer. Initially, it suppresses tumors by removing proteins and damaged organelles, thereby limiting genomic instability, chronic inflammation, and oxidative stress that can lead to cancer. However, at later stages, cancer can exploit autophagy to survive stress, meet high metabolic demands for growth and proliferation, resist therapy, and promote metastasis by recycling cellular components and activating their aggressive nature. The aim of this Special Issue is to further explore the role of autophagy within the tumor microenvironment, in metabolic reprogramming, tumor immunity, and cancer stem cells, including processes such as metabolic adaptation, and to develop specific autophagy inhibitors and modulators for treatment. These autophagy pathways can be manipulated for therapeutic purposes by strategies such as (1) inhibiting the pathways to starve cancer cells and (2) promoting pathways to induce cancer cell death, particularly through activating caspase-independent apoptosis pathways.

Guest Editor

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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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