

Special Issue

Molecular Mechanisms and Pathophysiology of Cerebral Gliomas: Towards Development of New Treatments

Message from the Guest Editors

Gliomas are the most frequent brain tumors, and, irrespective of the advances in biological and pharmaceutical knowledge, they still represent an unmet medical need. Low-grade gliomas inexorably evolve to high-grade tumors. Grade IV gliomas, astrocytomas IDH-mutant and glioblastomas IDH-wild type are the most aggressive forms of tumor, which have a poor prognosis and few therapeutic solutions. The discovery of new biomarkers and new molecular mechanisms involved in gliomas pathophysiology is required to develop innovative and more effective treatments. This Special Issue will include papers investigating the pathological mechanisms of gliomas and new druggable biomarkers. New therapeutic strategies and preclinical (in vitro, in vivo, ex vivo) studies are also welcome. We gather original research articles and review papers. Potential topics include, but are not limited to, the following:

- Molecular mechanisms in gliomagenesis and tumor progression;
- Identification of new biomarkers;
- Crosstalk between tumor (stem) cells and the brain microenvironment;
- New preclinical models;
- Innovative therapeutic approaches.

Guest Editors

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Deadline for manuscript submissions

closed (20 April 2025)



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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.

Editor-in-Chief

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