

Special Issue

Molecular, Cellular Mechanisms and Pathophysiology of Glioblastoma

Message from the Guest Editor

Glioblastoma multiforme (GBM) remains one of the most aggressive tumours, with a poor prognosis for patients and limited clinical effectiveness of treatment. Standard therapy—based on surgical resection, temozolomide and gamma radiation—has thus far failed, largely due to molecular mechanisms that counteract therapeutic effects. A key factor contributing to the difficulty of treating GBM is its high degree of differentiation, which frequently leads to recurrence, often accompanied by the development of a chemo- and radiation-resistant phenotypes. A deeper understanding of GBM pathophysiology, together with the pivotal molecular and cellular mechanisms involved, may open novel prospects for the development of targeted therapies as components of personalised treatment strategies. At the same time, the existing knowledge concerning the molecular mechanisms underlying glioblastoma resistance could be leveraged in this regard. This Special Issue is dedicated to a broad spectrum of research with the potential to transform glioblastoma therapy, including studies presenting novel formulations of drug carriers—such as liposomes, nanoparticles and polymers—as well as advanced carrier drugs.

Guest Editor

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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.

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