

## Special Issue

# Molecular Mechanisms and Therapies of Glioblastoma

### Message from the Guest Editors

Glioblastoma multiforme (GBM) is a rare cancer which, being responsible for 4% of all cancer deaths with a 5-year survival of 2%, is one of the deadliest human cancers with a median survival ranging from 14 to 30 months depending on the molecular subtype of the tumor. DNA methylation plays a key role in the pathogenesis and progression of GBM. Indeed, GBM harbors many genetic alterations that interfere with numerous cancer-related pathways. Furthermore, some subtypes of GBM are resistant to the action of temozolomide (TMZ), the most widely used alkylating agent in the treatment of GBM, as they have the promoter of the protein O6-methylguanine DNA methyltransferase (MGMT). Epigenetic modifications are gaining strong relevance in glioblastoma because they can be both clinical biomarkers and potential drug targets, as suggested by many preclinical studies. The purpose of this Special Issue is to highlight new advances in molecular mechanisms and new therapeutic approaches to eradicate GBM in order to improve our current understanding of the molecular and cellular mechanisms of GBM initiation, progression and therapy resistance.

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### Guest Editors

Dr. Laura Mosca

Dr. Cristina Pagano

Dr. Chiara Laezza

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### Deadline for manuscript submissions

closed (20 May 2024)



## International Journal of Molecular Sciences

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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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### Editor-in-Chief

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