Special Issue

Unraveling the Molecular Landscape of Primary Brain Tumors

Message from the Guest Editors

This Special Issue aims to highlight current progress and future directions in the molecular characterization of primary brain tumors. We invite contributions that explore the genetic, epigenetic, transcriptomic, and proteomic alterations driving tumor development and therapeutic resistance. Studies investigating novel biomarkers for diagnosis, prognosis, or treatment response, as well as research into the tumor microenvironment, cell signaling pathways, and mechanisms of immune evasion, are particularly welcome. By gathering original research and comprehensive reviews, this Special Issue seeks to accelerate the translation of molecular findings into clinical applications. Suggested topics include, but are not limited to, the following:

- Molecular classification and subclassification of primary brain tumors
- Genomic and epigenomic profiling
- Novel diagnostic, prognostic, and predictive biomarkers
- Molecular mechanisms of treatment resistance
- Tumor microenvironment and immune landscape
- Targeted therapies and personalized medicine approaches
- Integration of multi-omics data for tumor characterization

We look forward to you submissions.

Guest Editors

Dr. Giuseppe Lombardi

Dr. Francesco Pasqualetti

Dr. Tamara Ius

Deadline for manuscript submissions

31 October 2025

About the Journal

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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