

Special Issue

Neuro-Oncology: From Molecular Basis to Therapy

Message from the Guest Editor

Despite recent advances in the treatment of solid tumors, malignant brain tumors remain challenging and often fatal diseases. Irrespective of their heterogeneous nature, the brain with its specific brain microenvironment (e.g., the astrocytes) and anatomy (e.g., the blood–brain barrier) makes brain tumors unique diseases in many aspects. There is an unmet need for novel therapeutic approaches that take into account events in tumor development, primary and adaptive molecular tumor cell characteristics, cellular heterogeneity, as well as interactions between tumor cells and the brain microenvironment (e.g., immune cells, blood vessels, and neurons). Furthermore, molecular biomarkers could help to predict therapy efficacy, to tailor personalized treatment regimens, and to monitor therapy response. As damage to the healthy brain tissue severely impacts patients' quality of life, more insights into specific tumor cell vulnerabilities and molecular mechanisms of normal tissue toxicity are urgently needed. This Special Issue will cover a selection of original and review articles on the molecular biology of brain tumors and novel therapeutic approaches.

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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