

## Special Issue

# Immunological Barriers and Novel Therapeutic Strategies in Pediatric Brain Tumor Immunotherapy

### Message from the Guest Editor

Pediatric brain tumors, including aggressive entities such as diffuse intrinsic pontine glioma (DIPG), medulloblastoma, and other high-risk central nervous system malignancies, remain among the most challenging cancers to treat. Conventional treatments yield limited success and significant toxicity. Recent advances in immunotherapy, particularly adoptive cellular therapies like chimeric antigen receptor (CAR) T cells, offer promising new avenues to overcome immune evasion within the CNS and improve patient outcomes.

Our Special Issue invites original research and comprehensive reviews focused on innovative immunotherapeutic strategies tailored to brain tumors, with an emphasis on the following: Mechanisms underlying immune resistance and dysfunction in the CNS tumor microenvironment; Identification and validation of novel tumor-associated antigens and therapeutic targets; Immune profiling and biomarker discovery to guide personalized immunotherapies.

We look forward to contributions that accelerate the translation of immunological insights into safe and effective therapies.

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### Guest Editor

Dr. Dalia Haydar

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### Deadline for manuscript submissions

30 April 2026



## Biomedicines

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### Message from the Editor-in-Chief

*Biomedicines* (ISSN 2227-9059) is an open access journal devoted to all aspects of research on human health and disease, the discovery and characterization of new therapeutic targets, therapeutic strategies, and research of naturally driven biomedicines, pharmaceuticals, and biopharmaceutical products. Topics include pathogenesis mechanisms of diseases, translational medical research, biomaterial in biomedical research, natural bioactive molecules, biologics, vaccines, gene therapies, cell-based therapies, targeted specific antibodies, recombinant therapeutic proteins, nanobiotechnology driven products, targeted therapy, bioimaging, biosensors, biomarkers, and biosimilars. The journal is open for publication of studies conducted at the basic science and preclinical research levels. We invite you to consider submitting your work to *Biomedicines*, be it original research, review articles, or developing Special Issues of current key topics.

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### Editor-in-Chief

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