Special Issue

Exploring the Interplay of Glioblastoma Angiogenesis, ROS, and Tumor Microenvironment: Advancements in Combination Therapy and Bioinformatics Approaches

Message from the Guest Editor

Glioblastoma is an aggressive brain tumor with significant angiogenesis, triggered by hypoxia-inducible factors and aggravated by reactive oxygen species. The tumor microenvironment comprises immune cells and stromal components, is critical in therapeutic resistance. Conventional treatments such as radiation frequently fail due to the adaptive processes of the TME. Autophagy and apoptosis are critical cellular mechanisms that contribute to this resistance. Recent advances in cancer immunotherapy and combination medicines have provided promising alternatives. In silico and network pharmacology techniques, along with bioinformatics, provide tools for identifying novel therapeutic targets and optimizing treatment options. This Special Issue will address these pathways in order to create novel treatment modalities that improve GBM patient outcomes by using a combination of therapeutic techniques and precision medicine. We welcome the submission of review and original research articles that explore the intricate relationship between glioblastoma angiogenesis, ROS, and the tumor microenvironment, focusing on recent advancements in combination therapies and bioinformatic approaches.

Guest Editor

Dr. Md Ataur Rahman

Department of Oncology, Karmanos Cancer Center, School of Medicine, Wayne State University, Detroit, MI, USA

Deadline for manuscript submissions

31 August 2025



Cancers

an Open Access Journal by MDPI

Impact Factor 4.4 CiteScore 8.8 Indexed in PubMed



mdpi.com/si/217033

Cancers
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
cancers@mdpi.com

mdpi.com/journal/cancers





Cancers

an Open Access Journal by MDPI

Impact Factor 4.4 CiteScore 8.8 Indexed in PubMed



About the Journal

Message from the Editor-in-Chief

Cancers is an international online journal addressing both clinical and basic science issues related to cancer research. The journal is publishing in Open Access format, which will certainly evolve to ensure that the journal takes full advantage of the rapidly changing world of information and knowledge dissemination. It publishes high-quality clinical, translational, and basic science research on cancer prevention, initiation, progression, and treatment, as well as other related topics, particularly to capture the most seminal studies in the rapidly growing area of immunology, immunotherapy, and tumor microenvironment.

Editor-in-Chief

Prof. Dr. Samuel C. Mok.

Department of Gynecologic Oncology and Reproductive Medicine, The University of Texas MD Anderson Cancer Center, Houston, TX 77030, USA

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Embase, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Oncology) / CiteScore - Q1 (Oncology)

