

Special Issue on
Clinical Potential of Advanced MR Imaging Techniques to Study Glioblastomas

CALL FOR PAPERS

Glioblastoma (GBM) is the most aggressive and lethal primary brain tumor of the central nervous system in adults representing 50% of all gliomas and 20% of all intracranial solid lesions. Despite aggressive multimodal treatment strategies, the prognosis of patients with GBM remains poor. Therefore, it is important to understand the tumor microenvironment of GBMs at cellular and subcellular levels to better comprehend aggressive tumor behavior and lack of response to different treatment strategies.

Continuous progress and development in commonly used advanced neuroimaging techniques such as proton MR spectroscopy, diffusion, and perfusion MR imaging have resulted in a paradigm shift towards studying GBMs noninvasively. Taken together, these techniques provide a wealth of information that may supplement standard MR imaging findings.

This special issue provides a platform for researchers, clinicians and radiologists to discuss developments and applications of novel MR imaging biomarkers for the ultimate benefit and wellbeing of patients with GBMs. We invite investigators to contribute original research articles as well as review articles focusing on the potential use of metabolic and physiological MR imaging techniques to study GBMs.

Potential topics include but are not limited to the following:

- ▶ Differential diagnosis of tumor from nonneoplastic lesions using advanced imaging techniques
- ▶ Evaluation of the diagnostic potential of metabolic and physiologic MR imaging techniques in differentiating GBMs, brain lymphomas, and brain metastases
- ▶ Distinction of GBMs from low grade gliomas
- ▶ Potential clinical applications of advanced MR imaging techniques for the identification of molecular signatures in GBMs
- ▶ Identification of neoplastic invasion into normal brain parenchyma
- ▶ Role of imaging biomarkers for treatment planning of patients with GBMs
- ▶ Delineation of target volume for planning preoperative radiation therapy
- ▶ Evaluating treatment response to established and novel treatment regimens
- ▶ Differentiating of true progression from pseudoprogression in GBMs

Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/jo/cpamt/>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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