

## ABSTRACT

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Current and promising treatment strategies in glioma.

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Gliomas are the most common primary central nervous system tumors; despite recent advances in diagnosis and treatment, glioma patients generally have a poor prognosis. Hence there is a clear need for improved therapeutic options. In recent years, significant effort has been made to investigate immunotherapy and precision oncology approaches. The review covers well-established strategies such as surgery, temozolomide, PCV, and mTOR inhibitors. Furthermore, it summarizes promising therapies: tumor treating fields, immune therapies, tyrosine kinases inhibitors, IDH(Isocitrate dehydrogenase)-targeted approaches, and others. While there are many promising treatment strategies, none fundamentally changed the management of glioma patients. However, we are still awaiting the outcome of ongoing trials, which have the potential to revolutionize the treatment of glioma.

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