

ABSTRACT

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Challenges in glioblastoma research: focus on the tumor microenvironment.

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Glioblastoma (GBM) is the most deadly type of malignant brain tumor, despite extensive molecular analyses of GBM cells. In recent years, the tumor microenvironment (TME) has been recognized as an important player and therapeutic target in GBM. However, there is a need for a full and integrated understanding of the different cellular and molecular components involved in the GBM TME and their interactions for the development of more efficient therapies. In this review, we provide a comprehensive report of the GBM TME, which assembles the contributions of physicians and translational researchers working on brain tumor pathology and therapy in France. We propose a holistic view of the subject by delineating the specific features of the GBM TME at the cellular, molecular, and therapeutic levels.

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