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[Cancers \(Basel\)](#). 2011 Jun 10;3(2):2655-2666.

Glioblastoma Stem-Like Cells-Biology and Therapeutic Implications.

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Abstract

The cancer stem-cell hypothesis proposes that malignant tumors are likely to encompass a cellular hierarchy that parallels normal tissue and may be responsible for the maintenance and recurrence of glioblastoma multiforme (GBM) in patients. The purpose of this manuscript is to review methods for optimizing the derivation and culturing of stem-like cells also known as tumor stem cells (TSCs) from patient-derived GBM tissue samples. The hallmarks of TSCs are that they must be able to self-renew and retain tumorigenicity. The isolation, optimization and derivation of TSCs as outlined in this review, will be important in understanding biology and therapeutic applications related to these cells.

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