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Workshop Presentation

Cancer Stem Cells as a New Target Point for Treatment of Glioblastoma

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Abstract

Glioblastoma is a destructive form of brain tumor that kills most patients within two years of diagnosis. Treatments for glioblastoma include the usual options of surgery, radiation therapy and chemotherapy, but there is no effective treatment. The tumors are capable of spreading tendrils out into the brain and it can grow back in a matter of months after being removed. The cancer stem cell (CSC) provides an alternative model to explain the tumor cell heterogeneity. CSCs are thought to be the less differentiated populations in malignant tissues and are considered to be the cells that are responsible for the maintenance of tumor tissues, as well as for the relapse of tumors after conventional treatment. This review provided the confirmation for the presence of CSCs in primary tumors. The CSC hypothesis raises the expectation that targeting of CSCs in tumors will lead to an improved clinical outcome because they are thought to be the “root” of growing tumors.

Keywords: Glioblastoma, Cancer Stem Cells, Treatment

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