Angiogenesis and hypoxia in glioblastoma: a focus on cancer stem cells.

Patrizia Mongiardi M.

Istituto di Biologia Cellulare e Neurobiologia CNR and IRCCS Fondazione Santa Lucia, Via del Fosso di Fiorano, 64/65, 00143 Rome, Italy. mpatriziam@gmail.com.

Abstract

Many studies have elucidated the important role played by the tumor microenvironment in cancer evolution. In particular the formation of hypoxic areas within the expanding mass of a solid tumor and the consequent induction of an angiogenic switch are crucial steps that shape tumor progression. Focusing on glioblastoma multiforme (GBM), the most common and lethal brain cancer in the adult, I will review recent data that show how the microenvironment regulates crucial functions of glioblastoma stem cells (GSCs) which in turn affect the angiogenic process.

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