

## ABSTRACT

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Targeting Angiogenic Factors for the Treatment of Medulloblastoma.

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Medulloblastoma (MB) is the most frequent pediatric brain tumor. Despite conventional therapy, MB patients have high mortality and morbidity rates mainly due to the incomplete understanding of the molecular and cellular processes involved in development of this cancer. Similar to other solid tumors, MB demonstrated high endothelial cell proliferation and angiogenic activity, wherein new blood vessels arise from the pre-existing vasculature, a process named angiogenesis. MB angiogenesis is considered a hallmark for MB development, progression, and metastasis emphasizing its potential target for antitumor therapy. However, angiogenesis is tightly regulated by a set of angiogenic factors making it a complex process to be targeted. Although agents targeting these factors and their receptors are early in development, the potential for their targeting may translate into improvement in the clinical care for MB patients. In this review, we focus on the most potent angiogenic factors and their corresponding receptors, highlighting their basic properties and expression in MB. We describe their contribution to MB tumorigenesis and angiogenesis and the potential therapeutic targeting of these factors.

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