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## Tumor angiogenesis: A right target or a wrong choice?

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Formation of new blood vessels (angiogenesis) has been proved to be a basic prerequisite for sustainable growth and proliferation of tumor. Several growth factors, cytokines, small peptides and enzymes support tumor growth either independently or in synergy. Decoding secreted factors of angiogenesis in physiological and pathological state has remained a subject of intense interest during the past three decades. Currently, the most established approach for arresting tumor angiogenesis is blockade of the vascular endothelial growth factor (VEGF) pathway; however the clinical importance of this modality is still limited by several factors like adverse effects, toxicity, acquired drug resistance, non availability of valid biomarkers etc. Nevertheless angiogenesis being a normal physiological process imposes limitations in manoeuvring it as therapeutic target for tumor angiogenesis. The present paper offers an in depth discussions on the role of well-characterized angiogenic factors such as VEGF, basic fibroblast growth factor (bFGF), platelet derived growth factor (PDGF), placenta growth factor (PLGF), hepatocyte growth factor/scatter factor (HGF/SF) and angiopoietins (ANGs) in regulating tumor angiogenesis. An attempt has been made to discuss tumor angiogenesis with a perspective of 'a right target or a wrong choice' along with the limitations and challenges of antiangiogenic therapy in the current state of the art.

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