

Bevacizumab in the treatment of breast cancer.

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Source

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Abstract

Current evidence indicates that angiogenesis plays an important role in the pathogenesis of several malignancies, including breast cancer. Bevacizumab is a monoclonal antibody that targets the vascular endothelial growth factor (VEGF). Recent clinical data have demonstrated that the addition of bevacizumab to first-line chemotherapy improves the progression-free survival (PFS) of patients with advanced breast cancer. This review presents an update on the clinical studies evaluating the role of bevacizumab in combination with chemotherapy, as well as other agents, both in advanced and early disease. Moreover, although no definitive biomarkers have been identified so far, we provide current data regarding potentially useful predictive factors for treatment with bevacizumab. In addition, we review the suggested mechanisms that lead to resistance to VEGF targeted therapies and we present recent data with respect to the toxicity of bevacizumab.