

Bevacizumab (BEV)

- [A Randomized Open-Label, Noninferiority, Phase 3, Multicenter, Controlled Trial to Compare Laparoscopic Surgery With Open Surgery for Symptomatic, Noncurable Stage IV Colorectal Cancer \(JCOG1107\)](#)
- [Acquisition Process and Clinical Relevance of dMMR-Associated Mutational Signatures in Hepatocellular Carcinoma](#)
- [Efficacy and safety of immunotherapy or antiangiogenic agent-based treatment strategies versus chemotherapy as first-line treatment for extensive-stage small cell lung cancer: a network meta-analysis](#)
- [New Features in Screening of Retinopathy of Prematurity. Our Experience with New Recommendations for Retinopathy of Prematurity Screening](#)
- [Bevacizumab-targeted porous casein-coated cobalt ferrite nanoparticles: A potent theranostic agent for sunitinib delivery, VEGF trapping, and MRI](#)
- [Programmed death-ligand 1 expression and prognostic significance in bevacizumab treated ovarian cancer patients: Results from the phase IV MITO16A/MaNGO OV-2 translational study](#)
- [Case report and review of the literature regarding management of primary uterine primitive neuroectodermal tumors \(PNET\)](#)
- [Comparative Effectiveness of Atezolizumab Plus Bevacizumab Versus Tremelimumab Plus Durvalumab in Patients with Hepatocellular Carcinoma \(HCC\) in a Real-World Setting](#)



Bevacizumab is a [monoclonal antibody](#) that inhibits [angiogenesis](#) by clearing circulating [VEGF](#), resulting in a decline in the contrast-enhancing tumor, which does not always correlate with treatment response.

Bevacizumab, as antibodies, were applied to inhibit tumor angiogenesis by preventing activation of vascular endothelial growth factor receptor.

Bevacizumab, is sold under the trade name [Avastin](#) (Genentech/ Roche, South San Francisco, California).

Indications

[Bevacizumab for glioblastoma](#)

Bevacizumab for [diffuse intrinsic pontine glioma](#)

Meningioma

see [Bevacizumab for meningioma](#)

Neurofibromatosis type 2

see [Bevacizumab for neurofibromatosis type 2](#)

Radiation induced necrosis

[Radiation induced necrosis](#) in the brain has been treated using [bevacizumab](#).

Perez-Torres et al. validated the [VEGF](#) specificity by comparing the therapeutic efficacy of anti-VEGF with non-specific isotype control antibody. Additionally, they found that VEGF over-expression and [radionecrosis](#) developed simultaneously, which precludes preventative anti-VEGF treatment ¹⁾.

Resistance

Combining [VEGF](#) blockade with inhibition of [Angiopoietin 2](#) may potentially overcome resistance to [bevacizumab](#) therapy ²⁾.

References

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Perez-Torres CJ, Yuan L, Schmidt RE, Rich KM, Drzymala RE, Hallahan DE, Ackerman JJ, Garbow JR. Specificity of vascular endothelial growth factor treatment for radiation necrosis. *Radiother Oncol*. 2015 Sep 12. pii: S0167-8140(15)00462-4. doi: 10.1016/j.radonc.2015.09.004. [Epub ahead of print] PubMed PMID: 26376163.

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Scholz A, Harter PN, Cremer S, Yalcin BH, Gurnik S, Yamaji M, Di Tacchio M, Sommer K, Baumgarten P, Bähr O, Steinbach JP, Trojan J, Glas M, Herrlinger U, Krex D, Meinhardt M, Weyerbrock A, Timmer M, Goldbrunner R, Deckert M, Braun C, Schittenhelm J, Frueh JT, Ullrich E, Mittelbronn M, Plate KH, Reiss Y. Endothelial cell-derived angiopoietin-2 is a therapeutic target in treatment-naive and bevacizumab-resistant glioblastoma. *EMBO Mol Med*. 2015 Dec 14. pii: e201505505. doi: 10.15252/emmm.201505505. [Epub ahead of print] PubMed PMID: 26666269.

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