

[Open Peer Review on Qeios](#)

# Vanucizumab

National Cancer Institute

## Source

National Cancer Institute. *Vanucizumab*. NCI Thesaurus. Code C118578.

A humanized bispecific immunoglobulin G (IgG1) monoclonal antibody targeting both the vascular endothelial growth factor receptor (VEGFR) ligand VEGF-A and the Tie2 receptor ligand angiopoietin-2 (Ang-2), with potential antineoplastic and anti-angiogenic activities. Upon administration of vanucizumab, the anti-VEGF-A arm, which is based on bevacizumab, targets and binds to VEGF-A and the anti-Ang2 arm, which is based on the anti-Ang-2 antibody LC06, targets and binds to Ang2, thereby simultaneously binding and neutralizing both VEGF-A and Ang2. This prevents the activation of both VEGF-A/VEGFR- and Ang2/Tie2-mediated signaling pathways. Altogether, this results in the inhibition of proliferation of VEGF-A- and/or Ang2-overexpressing tumor cells. VEGF-A and Ang2, both upregulated in a variety of tumor cell types, play key roles in tumor cell proliferation, angiogenesis and metastasis.