

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Cancer	Integrin $\alpha_v\beta_3$ (CD51/CD61); VEGF; VEGFR-2 (KDR/Flk-1)	<i>In vitro</i> and mouse studies suggest dual inhibitors of integrin $\alpha_v\beta_3$ and VEGFR-2 could help treat cancer. Variants of VEGF were engineered to display the arginine-glycine-aspartic acid (RGD) integrin-binding motif, leading to the identification of a lead compound that inhibited both integrin $\alpha_v\beta_3$ and VEGFR-2 at nanomolar concentrations. In a mouse model of angiogenesis, the lead compound lowered the formation of new blood vessels compared with compounds that inhibited either target alone. Ongoing work includes testing the lead compound in animal models of cancer. At least four companies have inhibitors of VEGF or its receptors approved or in registration to treat cancer.	Patented by Stanford University; available for licensing	Papo, N. <i>et al. Proc. Natl. Acad. Sci. USA</i> ; published online Aug. 8, 2011; doi:10.1073/pnas.1016635108 Contact: Jennifer R. Cochran, Stanford University, Stanford, Calif. e-mail: jennifer.cochran@stanford.edu
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