This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Cancer				
Cancer	CXC chemokine receptor 4 (CXCR4; NPY3R); VEGF; VEGF receptor 1 (FLT1; VEGFR-1)	<p>Studies in mice suggest that combined inhibition of CXCR4 and VEGFR-1 could help treat cancer. In mice bearing prostate or breast cancer cell lines and lacking the kinase domain of Vegfr-1, the CXCR4 inhibitor AMD3100 decreased tumor volume and metastasis compared with those in mice with wild-type Vegfr-1. Next steps include testing the use of CXCR4 blockade to prevent resistance to anti-VEGF therapy in glioblastoma, colorectal and liver cancer models.</p> <p>Mozobil plerixafor (AMD3100), a CXCR4 antagonist from Genzyme Corp., is approved in the U.S. to mobilize stem cells for transplant in non-Hodgkin's lymphoma (NHL) and multiple myeloma (MM) patients.</p> <p>At least seven companies have CXCR4 antagonists in preclinical to Phase I development for cancer.</p> <p>SciBX 4(3); doi:10.1038/scibx.2011.67 Published online Jan. 20, 2011</p>	<p>Patent application filed for the combinatorial use of anti-CXCR4 therapy with other anticancer therapies; available for licensing</p> <p>Contact: Lambert Edelmann, Partners HealthCare, Boston, Mass. e-mail: ledelman@partners.org</p>	<p>Hiratsuka, S. <i>et al.</i> <i>Proc. Natl. Acad. Sci. USA</i>; published online Dec. 20, 2010; doi:10.1073/pnas.1016917108</p> <p>Contact: Rakesh K. Jain, Harvard Medical School, Boston, Mass. e-mail: jain@stele.mgh.harvard.edu</p>