This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Various				
HIV/AIDS; cancer	CXC chemokine receptor 4 (CXCR4; NPY3R)	<p>The X-ray crystal structure of CXCR4 could help guide the development of new compounds to treat HIV infection and cancer. Five separate crystal structures of CXCR4 with a small molecule antagonist or a cyclic peptide inhibitor revealed the receptor's homodimerization interface and the location and shape of the ligand-binding sites. Next steps include using the structures to aid drug discovery.</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 3(40); doi:10.1038/scibx.2010.1218 Published online Oct. 14, 2010</p>	Unpatented; licensing status unavailable	<p>Wu, B. <i>et al. Science</i>; published online Oct. 7, 2010; doi:10.1126/science.1194396</p> <p>Contact: Raymond C. Stevens, The Scripps Research Institute, La Jolla, Calif. e-mail: stevens@scripps.edu</p>