This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Infectious disease				
HIV/AIDS	CXC chemokine receptor 4 (CXCR4; NPY3R); CC chemokine receptor 5 (CCR5; CD195)	<p>Mouse studies suggest zinc finger nucleases targeting <i>CXCR4</i> in T cells could help treat HIV infection. CXCR4 and CCR5 are co-receptors for HIV entry into host cells. In a humanized mouse model of CXCR4-dependent HIV infection, transplantation of T cells transduced with zinc finger nucleases targeting <i>Cxcr4</i> transiently protected T cells from the virus, whereas transplantation of nontransduced cells did not. Next steps include studies in mouse models to determine if loss of <i>Cxcr4</i> negatively affects T cell function or trafficking.</p> <p>Sangamo BioSciences Inc.'s SB728, a zinc finger nuclease targeting <i>CCR5</i> in T cells, is in Phase I/II testing to treat HIV/AIDS.</p> <p>SciBX 4(20); doi:10.1038/scibx.2011.574 Published online May 19, 2011</p>	Patent status undisclosed; available for licensing through Sangamo BioSciences	<p>Wilen, C.B. <i>et al. PLoS Pathog.</i>; published online April 14, 2011; doi:10.1371/journal.ppat.1002020</p> <p>Contact: Robert W. Doms, University of Pennsylvania School of Medicine, Philadelphia, Pa. e-mail: doms@mail.med.upenn.edu</p>