This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Infectious disease				
HIV/AIDS	HIV p17 Gag-derived antigen (SL9)	<p><i>In vitro</i> studies suggest that T cells expressing a high-affinity T cell receptor (TCR) could be useful for treating HIV. A TCR isolated from T cells taken from an HIV patient had nanomolar affinity for SL9. Optimization of that TCR produced a higher affinity TCR with a K_D value in the picomolar range. CD8 T cells engineered to express that TCR had better control over HIV replication and greater production of IL-2 and interferon-γ in response to lower levels of SL9 than CD8 T cells expressing a nonoptimized TCR. Clinical trials of those engineered T cells to treat HIV infection are expected to begin in early 2009.</p> <p>Virxsys Corp.'s ALG889, a TCR peptide immunomodulator, is in Phase II testing to treat HIV infection.</p> <p>SciBX 1(44); doi:10.1038/scibx.2008.1078 Published online Dec. 11, 2008</p>	<p>Immunocore Ltd. holds patents on the methods of isolating TCRs and any TCRs found with those methods; Adaptimmune Ltd. is developing the engineered T cells under an exclusive license from Immunocore</p>	<p>Varela-Rohena, A. <i>et al. Nat. Med.</i>; published online Nov. 9, 2008; doi:10.1038/nm.1779</p> <p>Contact: James Riley, University of Pennsylvania, Philadelphia, Pa. e-mail: rileyj@exchange.upenn.edu</p>