This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Various				
Autoimmune; transplantation	Programmed cell death 1 ligand 1 (CD274; PD-L1; B7-H1)	<p><i>In vitro</i> and mouse studies suggest that upregulating PD-L1 expression could help induce T_{reg} activity to treat autoimmune diseases and reduce transplant rejection.</p> <p><i>In vitro</i>, PD-L1^{-/-} antigen-presenting cells showed less ability than wild-type cells to induce naïve CD4⁺ T cells to convert to anti-inflammatory T_{reg}. Also <i>in vitro</i>, beads coated with PD-L1 induced T_{reg}. In contrast to mice expressing PD-L1, mice lacking PD-L1 had less T_{reg} conversion and showed rapid onset of fatal inflammation after transplant of proinflammatory T cells. Next steps include ongoing efforts to develop PD-L1 agonists for <i>in vivo</i> applications.</p>	Patent pending; available for licensing worldwide	<p>Francisco, L. <i>et al. J. Exp. Med.</i>; published online Dec. 14, 2009; doi:10.1084/jem.20090847</p> <p>Contact: Arlene H. Sharpe, Harvard Medical School, Boston, Mass. e-mail: arlene_sharpe@hms.harvard.edu</p>
<p>SciBX 3(2); doi:10.1038/scibx.2010.66 Published online Jan. 14, 2010</p>				