This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Infectious disease				
Viral infection	PD-1 receptor (PDCD1; PD-1; CD279); programmed cell death 1 ligand 1 (CD274 molecule; PD-L1; B7-H1); hepatitis A virus cellular receptor 2 (HAVCR2; TIM3)	<p>A study in mice suggests that combined inhibition of TIM3 and PD-1 could help treat chronic viral infection. In mice chronically infected with lymphocytic choriomeningitis virus (LCMV), an antibody against PD-L1 plus a TIM3-targeting fusion protein increased proliferation of antigen-specific CD8⁺ T cells and decreased viral loads compared with either compound alone. Next steps include studying the effects of inhibiting the two pathways in conjunction with other antivirals.</p> <p>MDX-1106 (ONO-4538), a humanized anti-PD-1 antibody from Ono Pharmaceutical Co. Ltd. and Bristol-Myers Squibb Co., is in Phase I testing to treat cancer and HCV.</p> <p>AMP-224, a fusion protein that blocks the interaction between PD-1 and PD-L1, from Amplimmune Inc. and GlaxoSmithKline plc, is in preclinical development to treat cancer and infectious disease.</p> <p>SciBX 3(32); doi:10.1038/scibx.2010.991 Published online Aug. 19, 2010</p>	Patented; available for licensing	<p>Jin, H.-T. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online Aug. 2, 2010; doi:10.1073/pnas.1009731107</p> <p>Contact: Rafi Ahmed, Emory University School of Medicine, Atlanta, Ga. e-mail: rahmed@emory.edu</p>