This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Infectious disease				
HCV	CD160; CD244 molecule, natural killer cell receptor 2B4 (CD244; 2B4); CD274 (PD-L1); cytotoxic T lymphocyte–associated protein 4 (CTLA4); lymphocyte-activation gene 3 (CD223; LAG3); paired immunoglobin-like type 2 receptor-β (PILRβ; PIRβ); programmed cell death 1 (PDCD1; PD-1)	A study in mice suggests that targeting cytotoxic T lymphocyte (CTL) inhibitory receptors could be a strategy for treating chronic viral infections such as HCV. In a murine lymphocytic choriomeningitis virus model of chronic viral infection, CTLs exhausted by exposure to infected cells had higher expression of inhibitory receptors including PD-1, PD-L1, LAG3, PIRβ, CD160, 2B4 and CTLA4 compared with that seen in fresh CTLs. Infected mice co-injected with antibodies targeting PD-L1 and LAG3 showed higher virus-specific CTL activity and viral clearance than mock-treated or single antibody–treated controls. Next steps include determining the dynamics of combined inhibitory receptor repression in human HCV infection. ***SciBX* 1(45); doi:10.1038/scibx.2008.1104** **Published online Dec. 18, 2008**	Therapies targeting PD-1 patented by this group and others; other targets unpatented; licensing status not applicable	Blackburn, S. *et al. Nat. Immunol.;* published online Nov. 30, 2008; doi:10.1038/ni.1679 **Contact:** E. John Wherry, The Wistar Institute, Philadelphia, Pa. e-mail: jwherry@wistar.org