

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Infectious Disease				
Tuberculosis	Group I CD1 isoforms (CD1a, CD1b and CD1c)	A study in cell culture suggests that lipid antigens that bind Group 1 CD1 molecules could be useful in designing tuberculosis vaccines. Group 1 CD1 molecules present lipid antigens to T cells, stimulating adaptive immunity. In cultured human dendritic cells, <i>Mycobacterium tuberculosis</i> (Mtb) infection promoted rapid activation of CD1-restricted T cells compared with MHC Class II-restricted T cells, which recognize peptide antigens. Next steps include vaccinating monkeys with Mtb-derived lipids and testing for improved immunity compared with Mtb peptide antigen vaccination.	Several patents have been granted or are pending for the use of CD1 lipid antigens in vaccines and as therapeutics to Brigham and Women's Hospital and Harvard University; available for licensing	Hava, D.L. <i>et al.</i> ; <i>Proc. Natl. Acad. Sci. USA</i> ; published online August 6 2008; doi:10.1073/pnas.0804681105 Contact: Michael Brenner, Brigham and Women's Hospital, Boston, Mass. e-mail: mbrenner@rics.bwh.harvard.edu