This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Infectious disease				
Viral infection; lupus	Hematopoietic interferon-inducible nuclear proteins with a 200-amino-acid repeat (HIN-200) gene family; tumor protein p53 binding protein 1 (TP53BP1; p202); absent in melanoma 2 (AIM2; p210)	Studies *in vitro* showed that HIN-200 family member proteins mediate immune recognition of foreign DNA and could be modulated to treat viral infection and systemic lupus erythematosus (SLE). Both viral DNA produced during infection and the DNA of autoimmune SLE patients are recognized by immune systems as foreign DNA that needs to be cleared. *In vitro* assays identified the HIN-200 member TP35BP1 as a double-stranded DNA (dsDNA) binding protein. In cells treated with dsDNA, *TP35BP1* knockout showed greater caspase activation, which is necessary for the inflammasome response to foreign DNA. In cells treated with dsDNA, HIN-200 member AIM2 knockout prevented caspase activation. Next steps could include studying HIN-200 proteins during viral infection or in SLE models. ***SciBX*** **2(4); doi:10.1038/scibx.2009.147** **Published online Jan. 29, 2009**	Patent and licensing status unavailable	Roberts, T. *et al. Science*; published online Dec. 8, 2008; doi:10.1126/science.1169841 **Contact:** Katryn J. Stacey, The University of Queensland, Queensland, Australia e-mail: k.stacey@imb.uq.edu.au