This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Infectious disease				
HIV/AIDS	HIV gag; HIV p27 (nef); HIV pol; HIV env	Two studies in macaques suggest that mosaic HIV antigens could help boost immune responses to HIV vaccines. Mosaic antigens recombine natural HIV antigens into nine-amino-acid peptides. In one paper, mosaic antigens developed from the HIV-1 proteins gag, pol and env were delivered using a recombinant adenovirus serotype 26 (rAd26) vector. The mosaic antigens elicited greater CD8 ⁺ and CD4 ⁺ T cell responses to more HIV epitopes than naturally occurring HIV antigen sequences. In the other paper, rhesus monkeys were immunized with a plasmid DNA and a vaccinia virus that expressed mosaic gag and nef antigens. Following immunization, epitope-specific CD8 ⁺ and CD4 ⁺ T cell responses to gag and nef sequences from different HIV serotypes were higher than responses induced by standard vaccines. Next steps include testing the mosaic antigens in a Phase I trial for safety and immunogenicity.	Patent application filed; mosaic technology available for nonexclusive license	<p>Barouch, D. <i>et al. Nat. Med.</i>; published online Feb. 21, 2010; doi:10.1038/nm.2089 Contact: Dan H. Barouch, Beth Israel Deaconess Medical Center, Boston, Mass. e-mail: dbarouch@bidmc.harvard.edu</p> <p>Santra, S. <i>et al. Nat. Med.</i>; published online Feb. 21, 2010; doi:10.1038/nm.2108 Contact: Norman L. Letvin, Harvard Medical School, Boston, Mass. e-mail: nletvin@bidmc.harvard.edu</p>
<p>SciBX 3(11); doi:10.1038/scibx.2010.346 Published online March 18, 2010</p>				