

### This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
<b>Endocrine/metabolic disease</b>				
Diabetes	Dipeptidyl peptidase-4 (DPP- 4; CD26)	<p>Mouse studies suggest a DPP-4 peptide vaccine could help treat type 2 diabetes. DPP-4 increases degradation of glucagon-like peptide-1 (GLP-1), which normally enhances insulin secretion and insulin sensitivity. In mice, a DPP-4 vaccine candidate was shown to induce DPP-4-specific antibody titers and decrease DPP-4 in plasma and increase GLP-1 levels compared with the vaccine's protein carrier alone. In two mouse models of diabetes or in mice fed a high-fat diet, the vaccine delayed diabetes onset, decreased postprandial glucose levels and increased insulin sensitivity. Next steps could include testing the long-term effects of the vaccine and evaluating it in additional diabetes models.</p> <p><b>SciBX 7(16); doi:10.1038/scibx.2014.460</b>  <b>Published online April 24, 2014</b></p>	Patent and licensing status unavailable	<p>Pang, Z. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online March 17, 2014;            doi:10.1073/pnas.1322009111  <b>Contact:</b> Hironori Nakagami, Osaka            University, Osaka, Japan            e-mail:  <a href="mailto:nakagami@gts.med.osaka-u.ac.jp">nakagami@gts.med.osaka-u.ac.jp</a></p>