

### This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
<b>Endocrine/metabolic disease</b>				
Diabetes	Insulin	<p>Mouse studies suggest antibodies that prevent the recognition of specific autoimmunogenic insulin complexes could help treat type 1 diabetes. mAbs were produced that recognized a proinsulin peptide in complex with major histocompatibility complex class II (MHCII) protein when bound in register 3 but not in other registers. In a nonobese diabetic (NOD) mouse model for type 1 diabetes, injection of the mAb delayed the onset of type 1 diabetes and preserved pancreatic islet integrity, and it decreased the number of islet-infiltrating CD4<sup>+</sup> and CD8<sup>+</sup> T cells and B cells compared with injection of isotype-matched antibody controls. Ongoing work includes modifying the antibody for binding to human insulin and major histocompatibility complex class II DQ8 (HLA-DQ8) risk variant complexes.</p> <p><b>SciBX 7(9); doi:10.1038/scibx.2014.259</b>  <b>Published online March 6, 2014</b></p>	<p>Patent filed covering the antibody and the peptide-based generation of the antibodies to protect against type 1 diabetes; available for licensing</p>	<p>Zhang, L. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online Feb. 3, 2014; doi:10.1073/pnas.1323436111  <b>Contact:</b> John W. Kappler, National Jewish Health, Denver, Colo.                      e-mail: <a href="mailto:kapplerj@njhealth.org">kapplerj@njhealth.org</a></p>