This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Endocrine disease				
Diabetes	High mobility group box 1 (HMGB1); toll-like receptor 2 (TLR2); receptor for advanced glycation endproducts (RAGE)	<p><i>In vitro</i> and mouse studies suggest that inhibiting HMGB1 could help improve the efficacy of islet cell transplants for diabetes. In a diabetic mouse model, an anti-HMGB1 antibody administered during islet transplantation prevented islet graft cell loss, alleviated hyperglycemia and prevented production of proinflammatory interferon-γ (Ifnγ) compared with a control antibody. Mice with knockout of the HMGB1 receptors Tlr2 and Rage had normalized serum glucose levels following islet transplantation compared with control mice. Next steps could include studying other targets involved in the HMGB1 signaling pathway.</p> <p>At least five companies have HMGB1 inhibitors in preclinical testing for various indications.</p> <p>SciBX 3(8); doi:10.1038/scibx.2010.246 Published online Feb. 25, 2010</p>	Patent and licensing status unavailable	<p>Matsuoka, N. <i>et al. J. Clin. Invest.</i>; published online Feb. 1, 2010; doi:10.1172/JCI41360</p> <p>Contact: Yohichi Yasunami, Fukuoka University, Fukuoka, Japan e-mail: yasunami@fukuoka-u.ac.jp</p> <p>Contact: Masaru Taniguchi, RIKEN Research Center for Allergy and Immunology, Yokohama, Japan e-mail: taniguti@rcai.riken</p>