

This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Endocrine disease				
Diabetes	Adrenergic receptor α_{2a} (ADRA2A)	<p>Studies in rats and in human tissue samples suggest that antagonizing ADRA2A could help treat diabetes. In a rat model of diabetes, upregulation of <i>Adra2a</i> correlated with glucose intolerance and low insulin secretion. In those rats, a nonselective ADRA2A antagonist reversed the symptoms. A genomewide association study of diabetic patients detected a SNP in the <i>ADRA2A</i> gene that correlated ADRA2A overexpression with glucose intolerance and lower insulin secretion. In pancreatic islet samples from patients with the SNP, the ADRA2A antagonist increased insulin secretion compared with no treatment. Ongoing studies include identifying and testing selective ADRA2A antagonists.</p> <p>SciBX 2(46); doi:10.1038/scibx.2009.1692 Published online Dec. 3, 2009</p>	Patent and licensing status undisclosed	<p>Rosengren, A. <i>et al. Science</i>; published online Nov. 19, 2009; doi:10.1126/science.1176827</p> <p>Contact: Erik Renström, Lund University, Lund, Sweden e-mail: erik.renstrom@med.lu.se</p> <p>Contact: Anders Rosengren, same affiliation as above e-mail: anders.rosengren@med.lu.se</p>