This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Endocrine disease				
Diabetes	Insulin receptor	<p><i>In vitro</i> studies suggest that agonists targeting a particular α-helix/β-sheet interaction in the insulin receptor could help treat diabetes. Previous work had shown that the C-terminal segment of the insulin receptor's α-chain bound insulin. X-ray crystal structure studies and <i>in vitro</i> cross-linking experiments of the insulin receptor now show that an α-helical portion of the insulin receptor's α-chain interacts with the central β-sheet of the receptor's leucine-rich domain to form the insulin-binding pocket. Next steps include using the structure to guide the design of compounds that target the α-helix/β-sheet interaction to treat diabetes.</p> <p>At least 17 companies have insulin receptor agonists in development stages ranging from preclinical to marketed.</p> <p>SciBX 3(13); doi:10.1038/scibx.2010.406 Published online April 1, 2010</p>	International patent application filed; available for licensing	<p>Smith, B. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online March 22, 2010; doi:10.1073/pnas.1001813107</p> <p>Contact: Michael C. Lawrence, The Walter and Eliza Hall Institute of Medical Research, Parkville, Victoria, Australia e-mail: lawrence@wehi.edu.au</p> <p>Contact: Michael A. Weiss, Case Western Reserve University, Cleveland, Ohio e-mail: michael.weiss@case.edu</p> <p>Contact: Donald F. Steiner, The University of Chicago, Chicago, Ill. e-mail: dfsteine@uchicago.edu</p>