This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Endocrine disease				
Diabetes	Peptidylprolyl isomerase F (PPIF; cyclophilin D); pancreatic and duodenal homeobox 1 (PDX1; IPF1)	<p>Mouse studies suggest that inhibiting cyclophilin D in diabetic patients with dysfunctional PDX1 could help treat the condition. Genetic abnormalities in <i>PDX1</i> can cause loss of pancreatic β cells and trigger diabetes. In <i>Pdx1</i>^{+/-} mice, as compared with wild-type mice, inhibition of cyclophilin D with cyclosporine A prevented β cell death by blocking mitochondrial permeability transition pore (MPTP) opening. In <i>Ppif</i>^{-/-} and <i>Pdx</i>^{+/-} mice on a high-fat diet, β cell mass was restored and glucose and insulin activities were normalized compared with what was seen in mice expressing <i>Ppif</i>. Next steps could include identifying a compound to inhibit cyclophilin D.</p> <p>SciBX 3(22); doi:10.1038/scibx.2010.673 Published online June 3, 2010</p>	Patent and licensing status unavailable	<p>Fujimoto, K. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online May 17, 2010; doi:10.1073/pnas.0914209107 Contact: Gerald W. Dorn II, Washington University in St. Louis School of Medicine, St. Louis, Mo. e-mail: gdorn@dom.wustl.edu Contact: Kenneth S. Polonsky, same affiliation as above e-mail: Polonsky@dom.wustl.edu</p>