This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Endocrine/metabolic disease				
Diabetes	Protein tyrosine phosphatase 1B (PTP-1B; PTPN1)	<i>In vitro</i> studies identified PTP-1B-stabilizing antibody fragments that could lead to new treatments for diabetes. <i>In vitro</i> screening identified single-chain variable antibody fragments that recognized and stabilized the oxidized, inactive form of PTP-1B. In human cells stimulated with insulin, intracellular expression of the fragments increased insulin signaling compared with control fragments. Next steps include identifying a small molecule that mimics the conformational effects of the antibody fragments. TransTech Pharma Inc.'s PTP-1B inhibitor, TTP814, is in Phase II testing to treat diabetes. ISIS-PTP1BRx, a PTP-1B antisense oligonucleotide from Isis Pharmaceuticals Inc., is in Phase I testing to treat diabetes. MSI-1436, a small molecule PTP-1B inhibitor from Ohr Pharmaceutical Inc., is in Phase I testing to treat diabetes. SciBX 4(42); doi:10.1038/scibx.2011.1179 Published online Oct. 27, 2011	Two patent applications filed; available for licensing	Haque, A. <i>et al. Cell</i>; published online Sept. 30, 2011; doi:10.1016/j.cell.2011.08.036 Contact: Nicholas K. Tonks, Cold Spring Harbor Laboratory, Cold Spring Harbor, N.Y. e-mail: tonks@csbl.edu