This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Endocrine/metabolic disease				
Diabetes	Nuclear receptor corepressor 1 (NCOR1); peroxisome proliferation-activated receptor- γ (PPARG; PPAR γ)	Studies in mice suggest inhibiting interactions between NCOR1 and PPARγ could help treat diabetes. NCOR1 is a transcriptional regulator that interacts with PPARγ and regulates genes controlling insulin sensitivity. In mice, adipocyte-specific deletion of Ncor1 increased insulin sensitivity and lowered fasting blood glucose levels compared with those in wild-type mice. The knockout mice had greater weight gain but no increase in edema and heart weight, which was previously associated with PPARγ agonists. Next steps include exploring how the mechanism is connected to cyclin dependent kinase 5 (CDK5) phosphorylation of PPARγ, which has been shown to regulate insulin sensitivity. Actos pioglitazone, a PPARγ agonist from Takeda Pharmaceutical Co. Ltd., is marketed to treat type 2 diabetes. Avandia rosiglitazone, a PPARγ agonist from GlaxoSmithKline plc, is marketed in the U.S. to treat type 2 diabetes. Adipothermics Inc. has nonagonist compounds that reduce CDK5 phosphorylation of PPARγ in preclinical development. SciBX 4(46); doi:10.1038/scibx.2011.1298 Published online Dec. 1, 2011	Unpatented; available for licensing	Li, P. <i>et al. Cell</i>; published online Nov. 11, 2011; doi:10.1016/j.cell.2011.09.050 Contact: Jerrold M. Olefsky, University of California, San Diego, La Jolla, Calif. e-mail: jolefsky@ucsd.edu