



This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Various				
Diabetes	Peroxisome proliferation—activated receptor-γ (PPARG; PPARγ); cyclin dependent kinase 5 (CDK5)	In vitro and mouse studies identified PPARγ-binding compounds that could help treat type 2 diabetes with fewer side effects than PPARγ agonists. In vitro, the lead nonagonist compound bound to PPARγ and decreased its phosphorylation by CDK5. In a mouse model of diabetes, the compound improved insulin sensitivity compared with vehicle. In a genetic mouse model of diabetes, the compound lowered insulin levels and increased glucose tolerance with potency comparable to that of Avandia rosiglitazone but did not cause significant weight gain or fluid retention. Next steps include developing compounds with better pharmacokinetics.  Adipothermics Inc., a new company cofounded by the authors, has exclusively licensed the work. Actos pioglitazone from Takeda Pharmaceutical Co. Ltd. is marketed to treat type 2 diabetes.  Avandia rosiglitazone from GlaxoSmithKline plc is marketed in the U.S. to treat type 2 diabetes.	Patent application filed; exclusively licensed to Adipothermics	Choi, J.H. et al. Nature; published online Sept. 4, 2011; doi:10.1038/nature10383 Contact: Bruce M. Spiegelman, Harvard Medical School and Dana-Farber Cancer Institute, Boston, Mass. e-mail: bruce_spiegelman@dfci.harvard.ed Contact: Patrick R. Griffin, Scripps Florida, Jupiter, Fla. e-mail: pgriffin@scripps.edu
		SciBX 4(35); doi:10.1038/scibx.2011.995 Published online Sept. 8, 2011		