This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Endocrine disease				
Diabetes; obesity	Jumonji domain containing 1A (JMJD1A; JHDM2A)	<p>A study in mice suggests that targeting JMJD1A could help treat type 2 diabetes and obesity. Jhdm2A knockout mice were obese and had higher serum lipid levels and lower levels of peroxisome proliferation activated receptor-α (PPARA; PPAR-α), uncoupling protein 1 (UCP1) and other lipid metabolism regulators than wild-type mice. The knockout mice also had lower PPAR-γ (PPARG) activity than wild-type mice. Next steps include developing agonists of Jhdm2A and screening for compounds that prevent obesity in Jdhm2A knockouts.</p> <p>Avandia rosiglitazone and Actos pioglitazone are PPAR-γ agonists marketed by GlaxoSmithKline plc and Takeda Pharmaceutical Co. Ltd., respectively, to treat type 2 diabetes.</p> <p>At least six companies have PPAR-α and PPAR-γ agonists in various trials for type 2 diabetes.</p> <p>SciBX 2(6); doi:10.1038/scibx.2009.228 Published online Feb. 12, 2009</p>	<p>Patent application filed by The University of North Carolina at Chapel Hill Office of Technology Development</p> <p>Contact: Scott Forrest, The University of North Carolina at Chapel Hill Office of Technology Development, Chapel Hill, N.C. e-mail: scott_forrest@unc.edu</p>	<p>Tateishi, K. <i>et al. Nature</i>; published online Feb. 4, 2009; doi:10.1038/nature07777</p> <p>Contact: Yi Zhang, The University of North Carolina at Chapel Hill, Chapel Hill, N.C. e-mail: yi_zhang@med.unc.edu</p>