This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Endocrine disease				
Obesity; diabetes	Mothers against decapentaplegic homolog 3 (MADH3; SMAD3); transforming growth factor- β 1 (TGFB1)	<p>Mouse studies suggest inhibiting TGFB1-SMAD3 signaling could treat obesity and diabetes. In mice fed a high-fat diet, Smad3^{-/-} mice were protected from hepatic steatosis, and gained less weight and had better glucose and insulin tolerance than wild-type mice. In a mouse model of obesity and one of type 2 diabetes, an anti-TGFB1 antibody led to lower levels of phosphorylated Smad3 in white adipose tissue, less weight gain and better glucose and insulin tolerance than control antibody. Next steps could include studying TGFB1-SMAD3 signaling using tissue-specific knockout mice.</p> <p>SciBX 4(31); doi:10.1038/scibx.2011.883 Published online Aug. 11, 2011</p>	Patent and licensing status unavailable	<p>Yadav, H. <i>et al. Cell Metab.</i>; published online July 6, 2011; doi:10.1016/j.cmet.2011.04.013</p> <p>Contact: Sushil G. Rane, National Institutes of Health, Bethesda, Md. e-mail: ranes@mail.nih.gov</p>