This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Endocrine/metabolic disease				
Obesity	Nuclear receptor subfamily 1 group D member 1 (NR1D1; Rev-ERBA α); NR1D2 (Rev-ERBA β)	<p>Mouse studies suggest dual NR1D1 and NR1D2 agonists could help treat obesity. In the first two studies, genomic analyses of normal mouse livers showed that Nr1d1 and Nr1d2 bind many of the same target genes, including those regulating lipid metabolism and circadian rhythms. In these studies, <i>Nr1d1</i> and <i>Nr1d2</i> double-knockout mice had higher plasma levels of glucose and triglycerides and/or greater hepatosteatosis than single-knockout and wild-type mice. In the third study, mouse models of obesity showed that dual NR1D1 and NR1D2 agonists decreased fat mass and plasma levels of glucose, triglycerides and cholesterol compared with vehicle. Ongoing work at Scripps Florida includes testing the dual NR1D1 and NR1D2 agonists in mouse models of atherosclerosis and testing the agonists' effects on the sleeping patterns of normal mice.</p> <p>SciBX 5(16); doi:10.1038/scibx.2012.416 Published online April 19, 2012</p>	<p>Patent and licensing status for findings in first two studies unavailable</p> <p>Findings in third study patented by The Scripps Research Institute; licensing status undisclosed</p>	<p>Bugge, A. <i>et al. Genes Dev.</i>; published online April 1, 2012; doi:10.1101/gad.186858.112 Contact: Mitchell A. Lazar, Perelman School of Medicine at the University of Pennsylvania, Philadelphia, Pa. e-mail: lazar@mail.med.upenn.edu</p> <p>Cho, H. <i>et al. Nature</i>; published online March 29, 2012; doi:10.1038/nature11048 Contact: Ronald M. Evans, Salk Institute for Biological Studies, La Jolla, Calif. e-mail: evans@salk.edu</p> <p>Solt, L.A. <i>et al. Nature</i>; published online March 29, 2012; doi:10.1038/nature11030 Contact: Thomas P. Burris, Scripps Florida, Jupiter, Fla. e-mail: tburris@scripps.edu</p>