This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Endocrine disease				
Obesity	Serotonin (5-HT _{1A}) receptor (HTR _{1A}); leptin receptor (LEPR; CD295; OBR); tryptophan hydroxylase (TPH2)	<p>Studies in mice suggest that inhibiting HTR_{1A} could help treat obesity. In <i>Tph2</i> knockout mice, which cannot synthesize serotonin in the brain, Htr_{1a} signaling was impaired, resulting in smaller fat pads than those of wild-type mice. <i>Lepr</i> knockout mice, which also cannot synthesize serotonin in the brain, had lower appetite and greater energy expenditure than wild-type littermates, resulting in weight loss. Next steps include identifying appetite-decreasing inhibitors of HTR_{1A}.</p> <p>At least 10 companies have serotonin receptor agonists or antagonists in clinical and preclinical testing for various conditions.</p> <p>SciBX 2(35); doi:10.1038/scibx.2009.1347 Published online Sept. 10, 2009</p>	Findings unpatented; unavailable for licensing	<p>Yadav, V. <i>et al. Cell</i>; published online Sept. 3, 2009; doi:10.1016/j.cell.2009.06.051</p> <p>Contact: Gerard Karsenty, Columbia University, New York, N.Y. e-mail: gk2172@columbia.edu</p>