This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Endocrine/metabolic disease				
Obesity	Serotonin (5-HT _{1B}) receptor; serotonin (5-HT _{2C}) receptor	<p>Mouse studies suggest 5-HT_{1B} receptor agonists could improve the efficacy of 5-HT_{2C} receptor-targeted drugs in treating obesity. In mouse brain slices, co-treatment with 5-HT_{1B} and 5-HT_{2C} receptor agonists increased activation of neurons involved in suppression of food intake compared with either agent alone. The co-treatment also decreased food intake compared with either agent alone or saline. Next steps could include studying the effect of the combined agonists in preclinical obesity models.</p> <p>Arena Pharmaceuticals Inc.'s Belviq lorcaserin (APD356), which Eisai Co. Ltd. markets in the U.S., is a 5-HT_{2C} receptor agonist used to treat obesity. At least two other companies have 5-HT_{2C} receptor agonists in Phase II testing or earlier to treat obesity.</p> <p>At least 14 companies have 5-HT_{1B} receptor agonists on the market or in development for various neurology indications.</p> <p>SciBX 6(25); doi:10.1038/scibx.2013.627 Published online June 27, 2013</p>	Patent and licensing status undisclosed	<p>Doslikova, B. <i>et al. J. Neurosci.</i>; published online June 5, 2013; doi:10.1523/JNEUROSCI.4326-12.2013</p> <p>Contact: Lora K. Heisler, The University of Aberdeen, Aberdeen, U.K. e-mail: lora.heisler@abdn.ac.uk</p> <p>Contact: Brian Billups, University of Cambridge, Cambridge, U.K. e-mail: bjb41@cam.ac.uk</p>