This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Neurology				
Alzheimer's disease (AD)	Serotonin (5-HT ₄) receptor (HTR ₄)	<p>An <i>in vitro</i> and mouse study suggests that a benzoate-based HTR₄ agonist could be useful for treating AD. <i>In vitro</i>, amide derivatives of the partial HTR₄ agonist ML10302 had higher affinity for the receptor than the parent compound. In murine hippocampus and cortex lysates, the compounds raised levels of soluble amyloid-β (Aβ) precursor protein (APP), indicating less proteolysis of APP into toxic β-amyloid (Aβ), compared with those seen using the parent compound or in mock-treated controls. One of the compounds inhibited formation of Aβ fibrils <i>in vitro</i> compared with what was seen in untreated controls. Next steps include screening for compounds that optimally agonize HTR₄ and inhibit fibril formation as well as testing leads in animal models of AD.</p> <p>PRX-03140, a HTR₄ agonist from Epix Pharmaceuticals Inc. and GlaxoSmithKline plc, is in Phase II testing for AD.</p> <p>SciBX 2(16); doi:10.1038/scibx.2009.668 Published online April 23, 2009</p>	Unpatented; the researcher said she is seeking a collaborator for the research program	<p>Russo, O. <i>et al. J. Med. Chem.</i>; published online March 31, 2009; doi:10.1021/jm801327q</p> <p>Contact: Isabelle Berque-Bestel, Universite Victor Segalen, Bordeaux, France e-mail: isabelle.bestel@inserm.fr</p>