This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Neurology				
Pain	Cannabinoid CB ₂ receptor (CNR2); cyclooxygenase-2 (PTGS2; COX-2)	<p><i>In vitro</i> and <i>in vivo</i> studies have identified a paracetamol (acetaminophen) derivative that may be useful for treating pain. <i>In vitro</i>, <i>N</i>-(1<i>H</i>-indazol-5-yl)acetamide showed CNR2 and COX-2 inhibitory activities similar to those of paracetamol. In a murine model of formalin-induced pain, 50 mg/kg of the compound decreased nociceptive behavior compared with that seen in buffer-treated controls, and it had an equivalent effect to 200 mg/kg of paracetamol. Next steps include evaluating the small molecule and additional derivatives for potency and bioavailability in other animal models of pain.</p> <p>At least six companies have compounds targeting cannabinoid receptors in Phase II or earlier to treat pain.</p> <p>Multiple COX-2 inhibitors are marketed to treat pain.</p> <p>SciBX 2(2); doi:10.1038/scibx.2009.67 Published online Jan. 15, 2009</p>	Unpatented; compounds available for licensing from the Martin Luther University of Halle-Wittenberg, Institute of Pharmacy, Department of Pharmaceutical Chemistry	<p>Sinning, C. <i>et al. J. Med. Chem.</i>; published online Nov. 19, 2008; doi:10.1021/jm800807k</p> <p>Contact: Peter Imming, Martin Luther University of Halle-Wittenberg, Halle-Wittenberg, Germany e-mail: peter.imming@pharmazie.uni-halle.de</p>