This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Neurology				
Pain	Purinergic receptor P2X ligand-gated ion channel 7 (P2RX7; P2X7)	<p>Mouse and human studies suggest inhibiting P2X7 pore formation could help treat chronic pain. Mice carrying a <i>P2rx7</i> mutation known to impair pore formation or wild-type mice treated with a peptide that blocks pore formation both had lower mechanical allodynia than wild-type controls or mice treated with an inactive control peptide, respectively. In humans, SNPs that impaired P2X7 pore formation were associated with reduced surgery- or disease-related chronic pain. Researchers did not disclose next steps, which could include evaluating P2X7 inhibitors for their ability to block pore formation.</p> <p>GlaxoSmithKline plc's GSK1482160, a purinergic ATP receptor antagonist that targets P2X7, is in Phase I testing to treat pain.</p> <p>EVT 401, an oral small molecule P2X7 receptor antagonist from Evotec AG, is in Phase I testing to treat rheumatoid arthritis.</p> <p>Affectis Pharmaceuticals AG's AFC-5128, a P2X7 antagonist, is in preclinical development to treat pain.</p> <p>SciBX 5(14); doi:10.1038/scibx.2012.372 Published online April 5, 2012</p>	Unpatented; licensing status not applicable	<p>Sorge, R.E. <i>et al. Nat. Med.</i>; published online March 25, 2012; doi:10.1038/nm.2710</p> <p>Contact: Jeffrey S. Mogil, McGill University, Montreal, Quebec, Canada e-mail: jeffrey.mogil@mcgill.ca</p> <p>Contact: Michael W. Salter, The Hospital for Sick Children, Toronto, Ontario, Canada e-mail: mike.salter@utoronto.ca</p>