This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Neurology				
Parkinson's disease (PD)	Purinergic receptor P2X ligand-gated ion channel 7 (P2RX7; P2X7)	<p>A study in rodent cell culture suggests that antagonizing P2RX7 could help treat PD and other neurological diseases involving inflammation. In rat primary hippocampal cultures, overexpression of P2RX7 led to microglial activation compared with what was seen in mock-transfected controls. A small molecule agonist of P2RX7 lowered microglial activation compared with that seen in mock-treated controls. A mutant variant of P2RX7 unable to form a transmembrane pore conferred lower microglial activation than wild-type protein. Next steps include testing the effect of P2RX7 modulators on neuroinflammation in animals.</p> <p>AZD9065, a P2RX7 antagonist from AstraZeneca plc, is in Phase II testing for rheumatoid arthritis (RA).</p> <p>Evotec AG has a P2RX7 antagonist in Phase I testing for RA.</p> <p>SciBX 2(17); doi:10.1038/scibx.2009.721 Published online April 30, 2009</p>	Unpatented; licensing status not applicable	<p>Monif, M. <i>et al. J. Neurosci.</i>; published online March 25, 2009; doi:10.1523/JNEUROSCI.5512-08.2009</p> <p>Contact: David A. Williams, University of Melbourne, Melbourne, Victoria, Australia e-mail: davidaw@unimelb.edu.au</p>