This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Neurology				
Various indications	Cornichon homolog 2 (Drosophila) (CNIH2); CNIH3; AMPAR (GRIA)	<p><i>In vitro</i> studies and studies in rat brains suggest that targeting CNIH2 and CNIH3 could help treat a range of AMPAR-associated neurological indications. In rat brain homogenates, CNIH2 and CNIH3 physically associated with AMPAR subunits in the plasma membrane. In cell culture, expression of CNIH2 or CNIH3 increased the level and activity of AMPAR compared with that seen in controls. In a <i>Xenopus</i> oocyte model of neuronal activation, CNIH2 and CNIH3 slowed the deactivation of AMPARs after stimulation compared with that seen in mock-treated controls. Next steps could include developing small molecule modulators of these proteins. Cortex Pharmaceuticals Inc. has CX717, an AMPAR modulator, in Phase II trials for opiate-induced respiratory distress, attention deficit hyperactivity disorder (ADHD) and Alzheimer's disease (AD).</p> <p>TorreyPines Therapeutics Inc. has Tezampanel, an AMPAR antagonist, in Phase II trials for migraine and for muscle spasticity and rigidity secondary to spinal cord trauma.</p> <p>SciBX 2(12); doi:10.1038/scibx.2009.506 Published online March 26, 2009</p>	Patent and licensing status undisclosed	<p>Schwenk, J. <i>et al. Science</i>; published online March 6, 2009; doi:10.1126/science.1167852 Contact: Bernd Fakler, University of Freiburg, Freiburg, Germany e-mail: bernd.fakler@physiologie.uni-freiburg.de Contact: Nikolaj Klocker, same affiliation as above e-mail: nikolaj.kloecker@physiologie.uni-freiburg.de</p>