

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Neurology				
Migraine; pain	Caspase-1 (CASP1); high mobility group box 1 (HMGB1); NF-κB; pannexin 1 (PNX1)	<p>Mouse studies suggest inhibiting PNX1 in neurons could help treat migraine aura and headache. In the mouse brain, a migraine-linked electrophysiological phenomenon called cortical spreading depression (CSD) opened neuronal Pnx1 channels and activated Casp1, which led to Hmgb1 release in neurons and Nf-kb activation in astrocytes. In the mouse brain, PNX1 channel blockers and small interfering RNA-mediated knockdown of <i>Pnx1</i> inhibited the CSD-induced signaling cascade, whereas vehicle and control siRNA did not. Next steps could include evaluating the behavioral effects of inhibiting PNX1 in animal models for migraine.</p> <p>SciBX 6(10); doi:10.1038/scibx.2013.243 Published online March 14, 2013</p>	Patent and licensing status unavailable	<p>Karatas, H. <i>et al. Science</i>; published online March 1, 2013; doi:10.1126/science.1231897 Contact: Turgay Dalkara, Hacettepe University, Ankara, Turkey e-mail: tdalkara@hacettepe.edu.tr</p>