This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Neurology				
Stroke	Nicotinic acetylcholine receptor α_7 (CHRNA7)	<p>Studies in mice suggest that CHRNA7 agonists could help prevent brain damage associated with cardiac arrest and stroke. In mice, chemically induced cardiac arrest followed by resuscitation led to lower acetylcholinergic signaling and greater inflammation and cell death in the hippocampus than no treatment. In the same mice, a small molecule CHRNA7 agonist given 24 hours after cardiac arrest and resuscitation led to lower hippocampal inflammation and cell death than saline control. Next steps include testing more selective CHRNA7 agonists in primate models of ischemic stroke.</p> <p>Several companies have CHRNA7 agonists in clinical development for a range of psychiatric, neurodegenerative and metabolic indications.</p> <p>SciBX 4(11); doi:10.1038/scibx.2011.319 Published online March 17, 2011</p>	Unpatented; licensing status not applicable	<p>Norman, G.J. <i>et al. J. Neurosci.</i>; published online March 2, 2011; doi:10.1523/JNEUROSCI.4558-10.2011</p> <p>Contact: Greg J. Norman, The University of Chicago, Chicago, Ill. e-mail: gnorman@uchicago.edu</p>