This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Neurology				
Parkinson's disease (PD)	Nuclear receptor subfamily 4 group A member 2 (NR4A2; NURR1)	<p>A study in mice suggests that agonizing NR4A2 could help treat PD. NR4A2 is an orphan nuclear receptor previously linked to inflammation, and mutations in NR4A2 are associated with a hereditary form of PD. In mouse brains, small hairpin RNA knockdown of NR4A2 led to higher inflammation and neuron death after lipopolysaccharide treatment than that seen in mock-treated controls. In mixed brain cell cultures, NR4A2 knockdown increased microglia and astrocyte activation, inflammatory cytokine secretion and neuron killing compared with what was seen in mock-treated controls. Next steps include measuring levels of microglial NR4A2 activity in PD patients and screening for compounds that stimulate NR4A2-mediated transcriptional repression of proinflammatory genes.</p> <p>SciBX 2(17); doi:10.1038/scibx.2009.720 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:10.1016/j.cell.2009.01.038</p> <p>Contact: Christopher K. Glass, University of California, San Diego, La Jolla, Calif. e-mail: ckg@ucsd.edu</p> <p>Contact: Kaoru Saijo, same affiliation as above e-mail: ksaijo@ucsd.edu</p>