This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Neurology				
Parkinson's disease (PD)	α -Synuclein (SNCA)	<p>A study in rats identified multiple targets that could be useful for treating and diagnosing PD. In a rat model of PD, overexpression of the mutated A53T α-synuclein resulted in a 32% and 56% loss of dopaminergic neurons at 16 and 24 weeks, respectively, compared with what was seen using control vector. Neurons from rats with α-synuclein overexpression showed significant differences in levels of proteins involved in synaptic transmission, axonal transport and neuroinflammation compared with what was seen in control animals ($p < 0.05$). Next steps include evaluating nonsteroidal anti-inflammatory drugs in the rat PD model. Mayo8S2M, a chemically stabilized small interfering RNA targeting the α-synuclein gene from Alnylam Pharmaceuticals Inc., is in preclinical testing to treat PD. Affiris GmbH's PD01, a vaccine that targets the α-synuclein protein, is in preclinical testing for PD.</p> <p>SciBX 2(12); doi:10.1038/scibx.2009.504 Published online March 26, 2009</p>	Work unpatented; licensing status not applicable	<p>Chung, C.Y. <i>et al. J. Neurosci.</i>; published online March 18, 2009; doi:10.1523/JNEUROSCI.5427-08.2009 Contact: Ole Isacson, Harvard Medical School, Belmont, Mass. e-mail: isacson@hms.harvard.edu Contact: Chee Yeun Chung, same affiliation as above e-mail: cychung@mclean.harvard.edu</p>