This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Neurology				
Parkinson's disease	α -Synuclein (SNCA)	<p>Studies in human tissue samples and in <i>Drosophila</i> suggest that increasing tyrosine phosphorylation of SNCA could help treat or prevent PD. In cortical samples from patients with age-related dementia, levels of tyrosine 125-phosphorylated SNCA were lower than those in samples from healthy aged and young control subjects. In <i>Drosophila</i>, expression of a mutant human SNCA that lacked tyrosine 125 and could not be phosphorylated resulted in greater degeneration of dopaminergic neurons, more functional decline and higher levels of dementia-related SNCA aggregates than expression of wild-type human SNCA. Next steps could include identifying kinases responsible for tyrosine phosphorylation of SNCA.</p> <p>Companies that have therapies targeting SNCA in preclinical development to treat PD include Affiris AG, which is developing a vaccine, PD01, and Alnylam Pharmaceuticals Inc., which is developing Mayo8S2M, a chemically stabilized small interfering RNA.</p> <p>SciBX 2(41); doi:10.1038/scibx.2009.1541 Published online Oct. 22, 2009</p>	Patent and licensing status unavailable	<p>Chen, L. <i>et al. J. Clin. Invest.</i>; published online Oct. 12, 2009; doi:10.1172/JCI39088</p> <p>Contact: Mel B. Feany, Brigham and Women's Hospital, Boston, Mass. e-mail: mel_feany@hms.harvard.edu</p>