This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Neurology				
Parkinson's disease (PD)	Parkinson disease (autosomal recessive, juvenile) 2 parkin (PARK2; Parkin); PTEN induced putative kinase 1 (PINK1); DJ-1 (PARK7); synuclein, α -interacting protein synphilin (SNCAIP)	<p>Studies in cell and tissue cultures suggest that targeting the Parkin-PINK1-DJ-1 complex and its substrates may be useful for treating PD.</p> <p><i>In vitro</i> assays showed that Parkin, PINK1 and DJ-1 form a E3 ubiquitin ligase complex that marks unfolded and misfolded PD-associated substrates for degradation. Inducing mutations in PINK1 and Parkin lowered degradation of the pathogenic substrates. Next steps include studying the mechanisms that regulate Parkin-PINK1-DJ-1 complex activity.</p> <p>SciBX 2(9); doi:10.1038/scibx.2009.376 Published online March 5, 2009</p>	Findings unpatented; licensing status not applicable	<p>Xiong, H. <i>et al. J. Clin. Invest.</i>; published online Feb. 23, 2009; doi:10.1172/JCI37617</p> <p>Contact: Zhuohua Zhang, Burnham Institute for Medical Research, La Jolla, Calif. e-mail: benzz@burnham.org</p>