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)	<i>In vitro</i> studies suggest that enhancing PARK2 activity could potentially help treat PD. Loss-of-function mutations in <i>PARK2</i> , which encodes a ubiquitin ligase that helps maintain mitochondrial integrity and function, are associated with early onset PD. In cultured mammalian cells, fragmentation of mitochondria after membrane depolarization led to the recruitment of wild-type PARK2 to the damaged mitochondria, promoting their degradation and elimination. The findings suggest that mutated <i>PARK2</i> results in a failure to eliminate damaged mitochondria, leading to neuron loss in PD. Further studies could include evaluating the role PARK2 plays in the degradation of dysfunctional mitochondria <i>in vivo</i> .	Patent and licensing status unavailable	Narendra, D. <i>et al. J. Clin. Biol.</i> ; published online Nov. 24, 2008; doi:10.1083/jcb.200809125 Contact: Richard J. Youle, National Institutes of Health, Bethesda, Md. e-mail: youler@ninds.nih.gov
<i>SciBX</i> 1(45); doi:10.1038/scibx.2008.1113 Published online Dec. 18, 2008				