This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Neurology				
Alzheimer's disease (AD)	Dynamin 1-like (DNM1L; DRP1)	<p>A study in cell culture suggests that blocking S-nitrosylation of DRP1 could help treat AD. Cultured mouse neurons exposed to AD-associated β-amyloid ($A\beta$) oligomers had higher levels of nitric oxide and S-nitrosylated Drp1, which coordinates mitochondrial fusion, compared with what was seen in mock-treated controls. Mutation of cysteine residue Cys664 prevented S-nitrosylation and lowered the extent of mitochondrial fragmentation and synaptic dysfunction compared with what was seen in mock-treated controls. Next steps include identifying small molecule inhibitors of DRP1 nitrosylation and testing their efficacy in animal models of AD.</p> <p>SciBX 2(15); doi:10.1038/scibx.2009.633 Published online April 16, 2009</p>	Patents pending for unpublished discoveries of compounds to modulate Drp1 nitrosylation; available for licensing or partnering	<p>Cho, D.-H. <i>et al. Science</i>; published online April 3, 2009; doi:10.1126/science.1171091 Contact: Stuart A. Lipton, Burnham Institute for Medical Research, La Jolla, Calif. e-mail: slipton@burnham.org</p>