This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Neurology				
Alzheimer's disease (AD)	Casein kinase 2 (CSNK2A1; CK2)	<p>Studies in cell culture suggest that inhibiting CK2 could be useful for treating AD. In squid axoplasms, perfusion of oligomeric β-amyloid ($A\beta$) activated CK2 and deregulated fast axonal transport. CK2 inhibitors prevented oligomeric $A\beta$ from disrupting fast axonal transport.</p> <p>Deficiencies in fast axonal transport trigger adult-onset distal axonopathy and neurodegeneration and may be a mechanism underlying several neurological disorders, including AD. Next steps include screening for CK2 inhibitors that can cross the blood-brain barrier to restore normal CK2 levels <i>in vivo</i>.</p> <p>CX-4945, an oral CK2 inhibitor from Cylene Pharmaceuticals Inc., is in Phase I testing to treat cancer.</p> <p>SciBX 2(12); doi:10.1038/scibx.2009.500 Published online March 26, 2009</p>	Provisional patent application filed; available for licensing worldwide	<p>Pigino, G. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online March 16, 2009; doi:10.1073/pnas.0901229106</p> <p>Contact: S. Brady, University of Illinois, Chicago, Ill. e-mail: stbrady@uic.edu</p>