This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Neurology				
Alzheimer's disease (AD)	Eukaryotic translation initiation factor 2A, 65kDa (EIF2A); β -site APP cleaving enzyme-1 (BACE1)	<p>Cell culture and mouse studies suggest that inhibiting phosphorylation of EIF2A could help treat or prevent AD. In cultured primary neurons from human β-amyloid (Aβ) transgenic mice, preventing Eif2a dephosphorylation led to increased levels of Bace1 and Aβ production. Brains of mice with aggressive amyloid deposition and the brains of AD patients showed higher Eif2a phosphorylation and Bace1 levels than control brains. Next steps could include testing the effects of inhibitors of BACE1 or EIF2A phosphorylation in animal models.</p> <p>CoMentis Inc. and Astellas Pharma Inc. are developing ASP1702, a BACE1 inhibitor that is in Phase I testing to treat AD.</p> <p>TransTech Pharma Inc.'s TTP854 BACE1 inhibitor is in preclinical testing for AD.</p> <p>SciBX 2(3); doi:10.1038/scibx.2009.104 Published online Jan. 22, 2009</p>	Patent and licensing status unavailable	<p>O'Connor, T. <i>et al. Cell</i>; published online Dec. 24, 2008; doi:10.1016/j.neuron.2008.10.047</p> <p>Contact: Robert Vassar, Northwestern University Feinberg School of Medicine, Chicago, Ill. e-mail: r-vassar@northwestern.edu</p>