This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Neurology				
Traumatic brain injury	β -site APP-cleaving enzyme 1 (BACE1); γ -secretase	<p>A study in mice suggests that inhibiting BACE1 and γ-secretase could help treat complications of traumatic brain injury. Trauma causes rapid accumulation of β-amyloid (Aβ) at the site of injury, leading to inflammation, apoptosis and brain degeneration. Following traumatic injury, <i>Bace1</i> knockout mice had lower Aβ levels, brain atrophy and cognitive defects than wild-type controls. Mice treated with a γ-secretase inhibitor also showed less brain damage than untreated controls. Next steps include testing BACE1 and γ-secretase inhibitors to prevent secondary injury from traumatic brain injury in humans.</p> <p>CTS-21166, a BACE1 inhibitor from CoMentis Inc. and Astellas Pharma Inc., is in Phase I trials for AD.</p> <p>Eli Lilly and Co. and Elan Corp plc's γ-secretase inhibitor LY450139 is in Phase III AD trials.</p> <p>NIC5-15 from Humanetics Corp. and begacestat (GSI-953) from Wyeth are γ-secretase inhibitors in Phase II and I AD trials, respectively.</p> <p>SciBX 2(11); doi:10.1038/scibx.2009.466 Published online March 19, 2009</p>	Patent filed by Georgetown University; available for licensing	<p>Loane, D. <i>et al. Nat. Med.</i>; published online March 15, 2009; doi:10.1038/nm.1940</p> <p>Contact: Mark Burns, Georgetown University, Washington, D.C. e-mail: mpb37@georgetown.edu</p>