

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Neurology				
Alzheimer's disease (AD)	β -Site APP-cleaving enzyme 1 (BACE1); β -amyloid ($A\beta$)	<p><i>In vitro</i> and mouse studies identified a noncompetitive inhibitor of BACE1 that could help decrease $A\beta$ levels to treat AD. In cultured neuroblastoma cells, the BACE1 inhibitor TAK-070 decreased $A\beta$ secretion compared with vehicle control. In an amyloid-β (A4) precursor protein (APP) transgenic mouse model of AD, oral TAK-070 decreased levels of soluble $A\beta$ in the brain and improved behavioral deficits compared with vehicle control. Next steps could include testing the compound in additional preclinical models of AD. TAK-070 has been patented by Takeda Pharmaceutical Co. Ltd.</p> <p>CoMentis Inc. and Astellas Pharma Inc. have the BACE1 inhibitor CTS-21166 in Phase I testing to treat AD.</p> <p>TransTech Pharma Inc. has the inhibitor TTP854 in preclinical testing for the indication.</p> <p>SciBX 3(33); doi:10.1038/scibx.2010.1016 Published online Aug. 26, 2010</p>	Compound patented; licensing status undisclosed	<p>Fukumoto, H. <i>et al. J. Neurosci.</i>; published online Aug. 18, 2010; doi:10.1523/JNEUROSCI.2884-10.2010</p> <p>Contact: Hiroaki Fukumoto, Takeda Pharmaceutical Co. Ltd., Osaka, Japan e-mail: Fukumoto_Hiroaki@takeda.co.jp</p>