This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Neurology				
Alzheimer's disease (AD)	Acetylcholinesterase (ACHE; AChE)	<p>Studies in rats identified hybrid tacrine-nitrate compounds that inhibit ACHE with limited hepatotoxicity and could potentially be developed to treat AD. In a rat model of cognition impairment, the Ache-targeting tacrine-nitrate compounds improved cognitive performance similar to the parent compound tacrine. The highest tolerated dose of tacrine produced more liver enzymes and liver necrosis, whereas rats treated with an equimolar dose of a hybrid compound did not show hepatotoxicity. Next steps include scaling up the hybrid compound synthesis, testing the compounds in mouse models of AD and determining bioavailability.</p> <p>Neuro-Hitech Inc.'s Huperzine A, a cholinesterase inhibitor, is in Phase II testing to treat AD.</p> <p>SciBX 2(3); doi:10.1038/scibx.2009.102 Published online Jan. 22, 2009</p>	Compounds unpatented; available for licensing	<p>Fang, L. <i>et al. J. Med. Chem.</i>; published online Nov. 21, 2008; doi:10.1021/jm801131a Contact: Jochen Lehmann, Friedrich Schiller University Jena, Jena, Germany e-mail: j.lehmann@uni-jena.de Contact: Yihua Zhang, China Pharmaceutical University, Nanjing, China e-mail: zyhtgd@sohu.com</p>