This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Neurology				
Alzheimer's disease (AD)	Calcineurin (PPP3CA; PPP2B); nuclear factor of activated T cells cytoplasmic calcineurin-dependent 4 (NFATC4; NFAT3)	*In vitro* and mouse studies suggest that inhibiting PPP3CA could help treat AD. In mouse primary neurons, exposure to β-amyloid (Aβ) oligomers activated Ppp3ca, which in turn activated Nfatc4 and resulted in neuronal damage. In a mouse model of AD, inhibiting Ppp3ca or Ppp3ca-mediated activation of Nfatc4 prevented Aβ-induced damage. Next steps include ongoing efforts to characterize the upstream mechanisms that lead to PPP3CA activation. Voclosporin, a cyclosporine-based PPP3CA inhibitor from Isotechnika Pharma Inc. and Lux Biosciences Inc., is under FDA review to treat noninfectious uveitis. The compound also is in Phase II to prevent renal transplant rejection and in Phase III to treat psoriasis. ***SciBX*** **3(8); doi:10.1038/scibx.2010.249** **Published online Feb. 25, 2010**	Patent application filed; available for licensing from Massachusetts General Hospital	Wu, H.-Y. *et al. J. Neurosci.*; published online Feb. 17, 2010; doi:10.1523/JNEUROSCI.4456-09.2010 **Contact:** Bradley T. Hyman, Massachusetts General Institute for Neurodegenerative Disease, Charlestown, Mass. e-mail: bhyman@partners.org