This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Neurology				
Alzheimer's disease (AD)	Nuclear factor of activated T-cells cytoplasmic calcineurin-dependent 1 (NFATc1; NFAT1); NFATc4 (NFAT3); solute carrier family 1 glial high affinity glutamate transporter member 2 (SLC1A2; EAAT2)	<i>In vitro</i> and postmortem human brain sample studies suggest that inhibiting NFAT1 or NFAT3 could help treat AD-related cognitive decline. In brain samples from patients with mild cognitive impairment, NFAT1 localized to the nucleus from the cytosol. In patients with severe dementia or AD, NFAT3 localized to the nucleus. In postmortem hippocampal tissues, serum β -amyloid ($A\beta$) levels correlated with NFAT activation and severity of cognitive dysfunction. In rat astrocyte cultures, inhibition of Nfat blocked the $A\beta$ -induced decrease in Slc1a2 often seen in AD. Next steps include testing NFAT inhibitors for anti-inflammatory properties in animal models of AD.	Findings unpatented; licensing status not applicable	Abdul, H. <i>et al.</i> <i>J. Neurosci.</i> ; published online Oct. 14, 2009; doi:10.1523/JNEUROSCI.1064-09.2009 Contact: Christopher M. Norris, University of Kentucky College of Medicine, Lexington, Ky. e-mail: cnorr2@email.uky.edu
		SciBX 2(41); doi:10.1038/scibx.2009.1537 Published online Oct. 22, 2009		