This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Neurology				
Alzheimer's disease (AD)	Ryanodine receptor 1 (RyR1)	<i>In vitro</i> and mouse studies suggest inhibiting RyR1 could help treat AD. In neuroblastoma cell lines and mouse primary neurons overexpressing mutant amyloid precursor protein (APP), Dantrium IV dantrolene inhibited RyR1 and restored calcium concentrations and decreased APP processing compared with vehicle. In a transgenic mouse model of AD, dantrolene treatment beginning after onset of AD pathology decreased learning and memory deficits and β -amyloid (A β) plaque density compared with vehicle. Next steps include developing a dantrolene-like compound with higher specificity for RyR1. SpePharm Holding B.V. markets dantrolene to treat hypothermia. Armgo Pharma Inc.'s RyR1 modulator, Rycals, is in Phase II testing to treat arrhythmia and heart failure.	Findings unpatented; unavailable for licensing	Oulès, B. <i>et al. J. Neurosci.</i> ; published online Aug. 22, 2012; doi:10.1523/JNEUROSCI.0875-12.2012 Contact: Mounia Chami, UMR7275 Centre National de la Recherche Scientifique (CNRS) and University of Nice Sophia Antipolis, Valbonne, France e-mail: mchami@ipmc.cnrs.fr Contact: Frédéric Checler, same affiliation as above e-mail: checler@ipmc.cnrs.fr
<i>SciBX</i> 5(35); doi:10.1038/scibx.2012.933 Published online Sept. 6, 2012				