This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Neurology				
Alzheimer's disease (AD)	Phospholipase D3 (PLD3)	<p>Human sample and <i>in vitro</i> studies suggest stimulating PLD3 activity could help treat a subset of patients with late-onset AD. In 29 samples from 14 different families with late-onset AD, sequence analysis identified rare variants in <i>PLD3</i> that correlated with increased risk for late-onset AD. In human brain samples, <i>PLD3</i> expression was lower in samples from patients with AD than in those from healthy individuals. In a mouse neuroblastoma cell line, overexpression of <i>PLD3</i> decreased accumulation of extracellular pathogenic β-amyloid ($A\beta$) proteins, whereas shRNA knockdown of <i>PLD3</i> increased accumulation. Next steps include examining the effects of mutant and wild-type PLD3 levels on $A\beta$ levels in cell and animal models.</p> <p>SciBX 7(4); doi:10.1038/scibx.2014.121 Published online Jan. 30, 2014</p>	Patent status undisclosed; available for licensing through Washington University in St. Louis	<p>Cruchaga, C. <i>et al. Nature</i>; published online Dec. 11, 2013; doi:10.1038/nature12825 Contact: Carlos Cruchaga, Washington University in St. Louis, St. Louis, Mo. e-mail: ccruchaga@wustl.edu</p>