

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Neurology				
Alzheimer's disease (AD); neurology	3-Phosphoinositide-dependent protein kinase-1 (PDPK1)	<p>Mouse and cell culture studies suggest inhibiting PDPK1 activity could help treat AD and prion-associated diseases. In prion-infected, cultured mouse neurons and neurons from mice with amyloid plaques, a PDPK1 inhibitor led to higher levels of neuroprotective amyloid precursor protein (APP) and cellular prion protein (PrP; CD230) cleavage products than no treatment. In mouse models, the PDPK1 inhibitor decreased both AD-specific behavioral impairments and prion disease-specific motor impairments compared with no treatment. Next steps include testing other PDPK1 inhibitors and analyzing how PDPK1 is activated by pathogenic prions and amyloid peptides.</p> <p>Arno Therapeutics Inc.'s AR-12, a small molecule inhibitor of PDPK1, is in Phase I testing to treat lymphoma and solid tumors.</p> <p>Phusis Therapeutics Inc.'s PHT-427, a small molecule inhibitor of PDPK1, is in preclinical development to treat cancer.</p> <p>SciBX 6(36); doi:10.1038/scibx.2013.1001 Published online Sept. 19, 2013</p>	Patent and licensing status undisclosed	<p>Pietri, M. <i>et al. Nat. Med.</i>; published online Aug. 18, 2013; doi:10.1038/nm.3302</p> <p>Contact: Benoit Schneider, University Paris Descartes, Paris, France e-mail: benoit.schneider@parisdescartes.fr</p> <p>Contact: Jean-Marie Launay, Lariboisière Hospital, Paris, France e-mail: jean-marie.launay@lrb.aphp.fr</p>