This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Neurology				
Neurology	Progranulin (PGRN; PCDGF); histone deacetylases (HDACs)	<p>Cell culture studies suggest that small molecule agonists of <i>PGRN</i> expression could help treat frontotemporal dementia. <i>PGRN</i> loss-of-function mutations cause the condition, which resembles Alzheimer's disease (AD). In a cell culture screen of a 1,200-molecule library, the HDAC inhibitor suberoylanilide hydroxamic acid (SAHA) increased <i>PGRN</i> transcription compared with vehicle. In a cell culture model of frontotemporal dementia, SAHA raised <i>PGRN</i> expression to near normal levels compared with vehicle controls. Next steps include further screening to identify more potent and/or less toxic HDAC inhibitors and testing the inhibitors in models of the condition.</p> <p>Merck & Co. Inc. markets SAHA as Zolanza vorinostat for cutaneous T cell lymphoma (CTCL). EnVivo Pharmaceuticals Inc.'s HDAC inhibitor EVP-0334 has completed Phase I trials.</p> <p>At least three other companies have HDAC inhibitors in Phase II testing or earlier for other neurology indications.</p> <p>SciBX 4(19); doi:10.1038/scibx.2011.549 Published online May 12, 2011</p>	Unpatented; licensing status not applicable	<p>Cenik, B. <i>et al.</i> <i>J. Biol. Chem.</i>; published online March 23, 2011; doi:10.1074/jbc.M110.193433</p> <p>Contact: Joachim Herz, The University of Texas Southwestern Medical Center at Dallas, Dallas, Texas e-mail: joachim.herz@utsouthwestern.edu</p>