

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Neurology				
Depression	Histone deacetylase 6 (HDAC6)	<p><i>In vitro</i> and mouse studies suggest inhibiting HDAC6 in the brain could help treat depression. <i>In vitro</i>, ACY-738 had an IC₅₀ of 1.7 nM against HDAC6 with 100-fold selectivity over other class I HDACs, whereas ACY-775 had an IC₅₀ of 7.5 nM but was 700-fold more selective for HDAC6 over HDAC1. In mouse models of depression, ACY-738 or ACY-775 were brain penetrant and decreased symptoms of depression compared with vehicle when administered via intraperitoneal injection, although ACY-775 had to be given in suspension because of limited solubility. Ongoing work in collaboration with Acetylon Pharmaceuticals Inc. includes identifying an orally available and selective HDAC6 inhibitor that has appropriate safety and pharmacokinetic properties.</p> <p>SciBX 6(37); doi:10.1038/scibx.2013.1035 Published online Sept. 26, 2013</p>	Patent application filed; licensing status undisclosed	<p>Jochems, J. <i>et al.</i> <i>Neuropsychopharmacology</i>; published online Aug. 19, 2013; doi:10.1038/npp.2013.207</p> <p>Contact: Oliver Berton, University of Pennsylvania, Philadelphia, Pa. e-mail: bertonol@mail.med.upenn.edu</p>