This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Cancer	Histone deacetylase 8 (HDAC8)	<i>In vitro</i> studies identified an HDAC8-selective inhibitor that could help treat cancer. <i>In vitro</i> screening identified a hydroxamate-based molecule that inhibited HDAC8 with an IC_{50} of 70 nM and showed selectivity over other HDAC isoforms. In a panel of human T cell lymphoma and neuroblastoma cell lines, the inhibitor blocked proliferation at low- to mid-micromolar concentrations. Next steps include testing the HDAC8-selective inhibitors in mouse xenograft models of cancer. Pharmacyclics Inc. has the HDAC8 inhibitor PCI-34051 in preclinical development for various cancers. TeraDiscoveries Inc. has the HDAC8 inhibitor TA-H8 in preclinical development for T cell lymphoma. SciBX 5(47); doi:10.1038/scibx.2012.1231 Published online Dec. 6, 2012	Patent application filed; available for licensing	Suzuki, T. <i>et al. J. Med. Chem.</i>; published online Nov. 1, 2012; doi:10.1021/jm300837y Contact: Naoki Miyata, Nagoya City University, Aichi, Japan e-mail: miyata-n@phar.nagoya-cu.ac.jp Contact: Takayoshi Suzuki, Kyoto Prefectural University of Medicine, Kyoto, Japan e-mail: suzukit@koto.kpu-m.ac.jp