This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Neurology				
Addiction	Muscarinic acetylcholine receptor 5 (CHRM5; HM5)	<i>In vitro</i> studies identified HM5-selective antagonists that could help treat drug addiction. In mammalian cells expressing muscarinic acetylcholine receptors, a highly selective derivative of 1,2,5,6-tetrahydropyridine-3-carboxylic acid had 11-fold selectivity for HM5 over other muscarinic receptors. In striatal slices from wild-type rats, the compound inhibited dopamine release as effectively as genetic knockout of Hm5. Computational studies of the HM5 receptor identified the binding mode of the new compound. Next steps include testing the compound in animal models for drug abuse. SciBX 6(9); doi:10.1038/scibx.2013.220 Published online March 7, 2013	Findings unpatented; unavailable for licensing	Zheng, G. <i>et al. J. Med. Chem.</i> ; published online Feb. 4, 2013; doi:10.1021/jm301774u Contact: Guangrong Zheng, University of Arkansas for Medical Sciences, Little Rock, Ark. e-mail: gzheng@uams.edu