

### This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
<b>Neurology</b>				
Addiction	Nicotinic acetylcholine receptor $\alpha_5$ (CHRNA5)	<p>Studies in rodents suggest that agonizing CHRNA5 could help treat nicotine addiction. Previous genomewide association studies have shown that polymorphisms in CHRNA5 are correlated with risk for nicotine dependence and lung cancer. In mice, CHRNA5 deficiency led to greater nicotine consumption than normal CHRNA5 expression. In a rat model of nicotine addiction, injection with a lentiviral vector carrying CHRNA5 small hairpin RNA increased nicotine consumption compared with injection of a control lentiviral vector. Next steps include screening for positive allosteric modulators of CHRNA5 and testing those compounds in rodent models of nicotine addiction.</p> <p><b>SciBX 4(7); doi:10.1038/scibx.2011.197</b> Published online Feb. 17, 2011</p>	Unpatented; licensing status undisclosed	<p>Fowler, C.D. <i>et al. Nature</i>; published online Jan. 30, 2011; doi:10.1038/nature09797 <b>Contact:</b> Paul J. Kenny, Scripps Florida, Jupiter, Fla. e-mail: <a href="mailto:pjkenny@scripps.edu">pjkenny@scripps.edu</a></p>