This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Neurology				
Addiction	Nicotinic acetylcholine receptor $\alpha_4\beta_2$	Pharmacological and rat studies suggest the sazetidine A derivative VMY-2-95 could aid smoking cessation. Sazetidine A selectively desensitizes nicotinic acetylcholine receptor $\alpha_4\beta_2$. Chemical modification of sazetidine produced a lead compound, VMY-2-95, with receptor selectivity, affinity and desensitization efficiency similar to those for sazetidine A but with greater blood brain barrier penetration. In a rat model of nicotine addiction, subcutaneously injected VMY-2-95 decreased nicotine self-administration compared with saline control ($p < 0.05$). Next steps include scale up of VMY-2-95 synthesis to complete preclinical studies for a pre-IND package in smoking cessation.	Patent application filed; available for licensing	Yenugonda, V.M. <i>et al. J. Med. Chem.</i> ; published Sept. 18, 2013; doi:10.1021/jm4008455 Contact: Milton L. Brown, Georgetown University School of Medicine, Washington, D.C. e-mail: mb544@georgetown.edu
<i>SciBX</i> 6(40); doi:10.1038/scibx.2013.1135 Published online Oct. 17, 2013				