

THE DISTILLERY

This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Neurology				
Parkinson's disease (PD)	Dopamine D5 receptor	Studies in rodents suggest inhibiting dopamine D5 receptor in the subthalamic nucleus (STN) could help treat PD. In brain slices from normal rats, a dopamine D5 receptor inverse agonist decreased constitutive activity of dopamine D5 receptor compared with buffer. In brain slices from normal and dopamine-depleted rats, the inverse agonist decreased burst firing in the STN compared with buffer. In motor-impaired, dopamine-depleted rats, intrasubthalamic injection of the inverse agonist increased locomotor activity and normalized cellular metabolic activity compared with saline injection. Next steps could include designing dopamine D5 receptor-specific antagonists and testing in preclinical models of PD.	Patent and licensing status unavailable	Chetrit, J. <i>et al. J. Neurosci.</i> ; published online Sept. 11, 2013; doi:10.1523/JNEUROSCI.0453-13.2013 Contact: Abdelhamid Benazzouz, University of Bordeaux Segalen, Bordeaux, France e-mail: abdelhamid.benazzouz@u-bordeaux2.fr

SciBX 6(40); doi:10.1038/scibx.2013.1136 Published online Oct. 17, 2013