This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Neurology				
Parkinson's disease (PD)	Dopamine D2 receptor	<p><i>In vitro</i> and mouse studies suggest dopamine D2 receptor agonists could help treat neuroinflammation in diseases such as PD. Mice with <i>dopamine D2 receptor</i> knockout showed greater astrocyte activation and expression of inflammatory factors, lower levels of neuroprotective crystallin αB (CRYAB; HSPB5) and more severe toxin-induced neuroinflammation than wild-type mice. In a mouse model of PD, the dopamine D2 receptor agonist quinpirole decreased neuroinflammation and loss of dopaminergic neurons compared with saline. Next steps include developing astrocyte-specific dopamine D2 receptor agonists. Quinpirole is a research compound. At least nine companies have dopamine receptor D2 agonists in development stages ranging from preclinical to marketed for neurological indications.</p> <p>SciBX 6(2); doi:10.1038/scibx.2013.39 Published online Jan. 17, 2013</p>	Unpatented; licensing status not applicable	<p>Shao, W. <i>et al. Nature</i>; published online Dec. 16, 2012; doi:10.1038/nature11748 Contact: Jia-wei Zhou, Shanghai Institutes for Biological Sciences, Chinese Academy of Sciences, Shanghai, China e-mail: jwzhou@ion.ac.cn</p>