

### This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
<b>Neurology</b>				
Addiction	Adenosine A <sub>2A</sub> receptor (ADORA <sub>2A</sub> )	<p>Nonhuman primate studies suggest antagonists of presynaptic ADORA<sub>2A</sub> could help treat cannabis addiction. In cannabinoid-addicted nonhuman primates, an antagonist that selectively inhibits presynaptic ADORA<sub>2A</sub> decreased self-administration of Δ<sup>9</sup>-tetrahydrocannabinol (THC) and an antagonist selective for postsynaptic ADORA<sub>2A</sub> increased self-administration compared with vehicle. Next steps include testing presynaptic ADORA<sub>2A</sub> antagonists in cannabis users.</p> <p>Kyowa Hakko Kirin Co. Ltd. markets the ADORA<sub>2A</sub> antagonist Nouriasit istradefylline to treat Parkinson's disease (PD).</p> <p>At least seven other companies have ADORA<sub>2A</sub>-targeted compounds in Phase II or earlier testing to treat various neurological conditions other than addiction.</p> <p><b>SciBX 7(22); doi:10.1038/scibx.2014.648</b>  <b>Published online June 5, 2014</b></p>	Unpatented; licensing status not applicable	<p>Justinová, Z. <i>et al. J. Neurosci.</i>; published online May 7, 2014; doi:10.1523/JNEUROSCI.5073-13.2014</p> <p><b>Contact:</b> Sergi Ferré, National Institutes of Health, Bethesda, Md.  e-mail: <a href="mailto:sferre@mail.nih.gov">sferre@mail.nih.gov</a></p>