

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Neurology				
Addiction	Orexin 1 receptor (HCRTR1; OX1R)	<p><i>In vitro</i> and rat studies identified selective, tetrahydroisoquinoline-based OX1R antagonists that could help treat addiction. In <i>in vitro</i> assays, the tetrahydroisoquinoline-based antagonists showed higher specificities and potencies for OX1R than OX2R (HCRTR2). In a rat model of addiction, one of the most potent and selective antagonists decreased cocaine-induced addiction behaviors compared with vehicle. Next steps could include further optimization of the compounds to improve their potency and selectivity.</p> <p>Merck & Co. Inc.'s dual OX1R and OX2R antagonist suvorexant is under review to treat insomnia. At least two other companies have OX1R antagonists in Phase II or earlier testing for neurological indications.</p> <p>SciBX 6(36); doi:10.1038/scibx.2013.1000 Published online Sept. 19, 2013</p>	Patent and licensing status unavailable	<p>Perrey, D.A. <i>et al. J. Med. Chem.</i>; published online Aug. 13, 2013; doi:10.1021/jm400720h</p> <p>Contact: Yanan Zhang, RTI International, Research Triangle Park, N.C. e-mail: yzhang@rti.org</p>