

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Neurology				
Insomnia	Adenosine A ₁ receptor (ADORA1)	<p>A study in mice suggests that stimulating adenosine production in astrocytes could help treat insomnia. Mice with astrocyte-specific genetic disruption of adenosine secretion had lower levels of brain activity associated with the need to sleep and shorter recovery from sleep deprivation than wild-type mice. Wild-type mice treated with the ADORA1 inhibitor 8-cyclopentyl-1,3-dimethylxanthine mimicked the behavior of the transgenic mice, indicating that ADORA1 was involved in the astrocytic adenosine-dependent sleep mechanism. Next steps include developing modulators of adenosine production in astrocytes.</p> <p>SciBX 2(8); doi:10.1038/scibx.2009.331 Published online Feb. 26, 2009</p>	Unpatented; licensing status not applicable	<p>Halassa, M.M. <i>et al. Neuron</i>; published online Jan. 28, 2009; doi:10.1016/j.neuron.2008.11.024</p> <p>Contact: Philip G. Haydon, Tufts University School of Medicine, Boston, Mass. e-mail: philip.haydon@tufts.edu</p>