

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Autoimmune disease				
Multiple sclerosis (MS)	Glutamate receptor ionotropic AMPA (GRIA; GLUR; AMPAR)	<p>A study in mice and in cell culture suggests that antagonizing AMPAR could help treat MS. In a mouse model of MS, mice subjected to autoimmune activation had higher AMPAR levels and glutaminergic activity than mock-treated controls. In the same models, an AMPAR antagonist lowered synaptic dysfunction compared with that seen in untreated controls. Next steps include developing selective AMPAR antagonists and characterizing presynaptic and postsynaptic changes in brain architecture caused by MS.</p> <p>Topamax topiramate, an AMPAR antagonist, is marketed by Johnson & Johnson to treat migraine and is in Phase II testing for alcohol dependence.</p> <p>SciBX 2(13); doi:10.1038/scibx.2009.521 Published online April 2, 2009</p>	Unpatented; licensing status not applicable	<p>Centonze, D. <i>et al. J. Neurosci.</i>; published online March 18, 2009; doi:10.1523/JNEUROSCI.5804-08.2009</p> <p>Contact: Gianvito Martino, San Raffaele Scientific Institute, Milan, Italy e-mail: martino.gianvito@hsr.it</p> <p>Contact: Diego Centonze, Tor Vergata University, Rome, Italy e-mail: centonze@uniroma2.it</p>