

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Neurology				
Autism; obsessive compulsive disorder (OCD)	FK506 binding protein 1A, 12kDa (FKBP1A; FKBP12)	<p>Studies in mice suggest that increasing FKBP12 activity in some regions of the brain could help treat autism and OCD. Conditional knockout of <i>Fkbp12</i> in mice increased hippocampal long-term potentiation but also caused behavioral alterations such as greater contextual fear memory and perseveration, which are typical traits of OCD-like behavior. Molecular analysis showed that FKBP12 generated its behavioral effects via modulation of mammalian target of rapamycin (mTOR)-mediated protein synthesis. Further studies are necessary to identify compounds that mimic FKBP12 activity without interfering with other FKBP12 targets such as ryanodine receptors or calcineurin.</p> <p>At least nine companies have therapeutics targeting mTOR signaling in development stages ranging from preclinical to marketed for various non-neurological indications.</p> <p>SciBX 2(1); doi:10.1038/scibx.2009.24 Published online Jan. 8, 2009</p>	Findings unpatented; mice available for licensing	<p>Hoeffler, C. <i>et al. Cell</i>; published online Dec. 10, 2008; doi:10.1016/j.neuron.2008.09.037</p> <p>Contact: Eric Klann, New York University, New York, N.Y. e-mail: eklann@cns.nyu.edu</p>