This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Neurology				
Cognitive dysfunction	AMPA 1 glutamate receptor (GRIA1; GLUR1); NMDA receptor NR1 subtype (GRIN1; NR1); proteasome	<p>Rat studies suggest blocking glutamate receptor degradation could help prevent stress-induced cognitive impairment. In rats, repeated stress led to degradation of Gria1 and Nr1 via the ubiquitin-proteasome pathway and deficits in prefrontal cortex-mediated cognitive processes compared with no stress. In the stressed rats, a proteasome inhibitor prevented the loss of glutamatergic signaling and associated cognitive impairment compared with saline. Next steps include developing and evaluating brain-penetrant compounds targeting components of the pathway, including glutamate receptors.</p> <p>SciBX 5(11); doi:10.1038/scibx.2012.285 Published online March 15, 2012</p>	Unpatented; licensing status not applicable	<p>Yuen, E.Y. <i>et al. Neuron</i>; published online March 8, 2012; doi:10.1016/j.neuron.2011.12.033 Contact: Zhen Yan, State University of New York at Buffalo, Buffalo, N.Y. e-mail: zhenyan@buffalo.edu</p>