This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Neurology				
Fragile X syndrome	Ribosomal protein S6 kinase 70 kDa polypeptide 1 (RPS6KB1; S6K1); fragile X mental retardation 1 (FMR1)	<p>Mouse studies suggest inhibiting S6K1 could help treat fragile X syndrome. Phosphorylation of the FMR1 kinase S6K1 is greater in lymphocytes and brain tissue from patients with fragile X syndrome than in samples from healthy controls. In an <i>Fmr1</i> knockout mouse model for fragile X syndrome, <i>S6k1</i> deficiency decreased abnormal neuron morphology and social interaction deficits and increased motor skills and new object recognition compared with normal <i>S6k1</i> expression. The deficiency also reduced weight gain and macroorchidism. Ongoing work includes testing an S6K1 inhibitor in the <i>Fmr1</i> knockout model for fragile X syndrome.</p> <p>SciBX 5(42); doi:10.1038/scibx.2012.1118 Published online Oct. 25, 2012</p>	Unpatented; available for licensing or partnering	<p>Bhattacharya, A. <i>et al. Neuron</i>; published online Oct. 18, 2012; doi:10.1016/j.neuron.2012.07.022 Contact: Eric Klann, New York University, New York, N.Y. e-mail: eklann@cns.nyu.edu</p>