This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Neurology				
Rett syndrome	Serotonin (5-HT _{1A}) receptor; solute carrier family 6 neurotransmitter transporter GABA member 1 (SLC6A1; GAT1)	<p>Studies in mice suggest that inhibiting GAT1 or agonizing 5-HT_{1A} could help treat respiratory symptoms associated with Rett syndrome. In a mouse model of Rett syndrome, the 5-HT_{1A} agonist 8-OH-DPAT and the γ-aminobutyric acid (GABA) reuptake inhibitor NO-711, which acts by inhibiting GAT1, separately decreased the frequency of apnea compared with vehicle control. Next steps could include clinical trials of 5-HT_{1A} agonists in patients with Rett syndrome.</p> <p>Buspirone is a generic 5-HT_{1A} agonist approved for anxiety.</p> <p>At least five companies have 5-HT_{1A} agonists in Phase I or II development for neurological indications.</p> <p>SciBX 3(40); doi:10.1038/scibx.2010.1216 Published online Oct. 14, 2010</p>	Unpatented; licensing status unavailable	<p>Abdala, A.P.L. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online Oct. 4, 2010; doi:10.1073/pnas.1012104107 Contact: Julian F.R. Paton, University of Bristol, Bristol, U.K. e-mail: julian.f.r.paton@bristol.ac.uk</p>