This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Neurology				
Depression	Hyperpolarization activated cyclic nucleotide-gated potassium channel 2 (HCN2)	<p>Mouse studies suggest increasing hyperpolarization-activated current in dopaminergic neurons in the brain's ventral tegmental area (VTA) could help protect against depression. Earlier mouse studies showed that social defeat stress enhanced hyperpolarization-activated current in VTA neurons. Mice resilient to social defeat stress had a hyperpolarization-activated current that was stronger than that in mice susceptible to such stress. In the susceptible mice, VTA dopaminergic neuron-specific overexpression of HCN2 to further potentiate the hyperpolarization-activated current reversed social avoidance and other depression-associated behaviors. Next steps include studies to understand the molecular mechanisms that underlie the stronger hyperpolarization-activated current in depression-resilient mice.</p> <p>SciBX 7(20); doi:10.1038/scibx.2014.588 Published online May 22, 2014</p>	Unpatented; licensing status not applicable	<p>Friedman, A.K. <i>et al. Science</i>; published online April 18, 2014; doi:10.1126/science.1249240 Contact: Ming-Hu Han, Icahn School of Medicine at Mount Sinai, New York, N.Y. e-mail: ming-hu.han@mssm.edu</p>