This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Neurology				
Autism	Eukaryotic translation initiation factor 4E (eIF4E)	<p>Mouse studies suggest inhibiting eIF4E could help treat autism spectrum disorder (ASD). In mice, greater eif4e expression led to increased protein translation, electrophysiological abnormalities and autistic behaviors compared with normal eif4e expression. In those autistic mice, a small molecule inhibitor of eIF4E signaling decreased protein translation and autistic behaviors compared with vehicle and reversed electrophysiological abnormalities. Next steps include testing whether targeting eif4e in mouse models of fragile X syndrome corrects disease-associated autistic behaviors and developing a method to measure the translation of various proteins in mouse models of autism.</p> <p>Isis Pharmaceuticals Inc.'s eIF-4E ASO, a second-generation antisense compound targeting eIF4E, is in Phase II testing to treat prostate cancer and non-small cell lung cancer (NSCLC).</p> <p>Clavis Pharma ASA and Translational Therapeutics Inc. have TRX-201, a Lipid Vector Technology (LVT) derivative of ribavirin that inhibits eIF4E, in preclinical development to treat thyroid cancer.</p> <p>SciBX 6(3); doi:10.1038/scibx.2013.63 Published online Jan. 24, 2013</p>	Patent and licensing status unavailable	<p>Santini, E. <i>et al. Nature</i>; published online Dec. 23, 2012; doi:10.1038/nature11782</p> <p>Contact: Eric Klann, New York University, New York, N.Y. e-mail: eklann@cns.nyu.edu</p>