This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Neurology				
Addiction	FYN oncogene related to SRC FGR YES (FYN); NMDA receptor NR2B subtype (GRIN2B; NR2B)	<p>A study in rats suggests that inhibiting <i>NR2B</i> or <i>FYN</i> in the dorsomedial striatum could help treat alcohol addiction. In rats, repeated cycles of ethanol administration and withdrawal led to increased <i>Nr2b</i> and <i>Fyn</i> signaling in the dorsomedial striatum compared with administration of saline control. In rats with a history of high voluntary ethanol consumption, the <i>Nr2b</i> inhibitor ifenprodil or <i>Fyn</i> inhibitor PP2 significantly decreased ethanol intake compared with vehicle control ($p < 0.05$). Next steps could include identifying inhibitors of <i>NR2B</i> or <i>FYN</i> and evaluating their effects in mouse models of alcohol addiction.</p> <p>Ifenprodil is an NR2B-selective NMDA receptor inhibitor research reagent available from Tocris Bioscience Inc.</p> <p>PP2, a research reagent that selectively inhibits members of the Src family of protein tyrosine kinases, including FYN, is available from EMD Chemicals Inc.</p> <p>SciBX 3(31); doi:10.1038/scibx.2010.961 Published online Aug. 12, 2010</p>	Patent and licensing status unavailable	<p>Wang, J. <i>et al. J. Neurosci.</i>; published online July 28, 2010; doi:10.1523/JNEUROSCI.2268-10.2010</p> <p>Contact: Dorit Ron, The Gallo Research Center, University of California, San Francisco, Calif. e-mail: dron@gallo.ucsf.edu</p>