This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Neurology				
Alzheimer's disease (AD); schizophrenia	Nicotinic acetylcholine receptor α_7 (CHRNA7)	<p><i>In vitro</i> and mouse studies identified a CHRNA7* allosteric modulator that could help treat cognitive dysfunction associated with schizophrenia or AD. In <i>Xenopus</i> oocytes, a series of arylpyrid-3-ylmethanones were identified as positive allosteric modulators of CHRNA7. In mice, one of the compounds crossed the blood brain barrier. In a mouse model of cognitive dysfunction, the compound reversed cognitive impairment, whereas a CHRNA7 antagonist blocked the protective effects of the compound. Next steps include screening for off-target effects and toxicity.</p> <p>At least five companies have CHRNA7 agonists in Phase III testing or earlier to treat AD or schizophrenia.</p> <p>SciBX 6(44); doi:10.1038/scibx.2013.1266 Published online Nov. 14, 2013</p>	Unpatented; not yet available for licensing	<p>Hogenkamp, D.J. <i>et al. J. Med. Chem.</i>; published online Oct. 4, 2013; doi:10.1021/jm400704g</p> <p>Contact: Derk J. Hogenkamp, University of California, Irvine, Calif. e-mail: dhogenka@uci.edu</p>