

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Neurology				
Schizophrenia	Dopamine D2 receptor; arrestin β 2 (ARRB2)	<p><i>In vitro</i> and mouse studies suggest dopamine D2 receptor agonists that selectively activate ARRB2 signaling could treat schizophrenia with fewer side effects than marketed antipsychotics. A series of compounds derived from the antipsychotic Abilify aripiprazole bound the D2 receptor and selectively activated ARRB2 signaling. In two mouse models of chemically induced psychosis, two compounds decreased hyperlocomotion compared with vehicle. In a third mouse model of chemically induced catalepsy, one compound caused fewer neurological side effects than the generic antipsychotic haloperidol. Next steps include optimizing the agonists and testing them in additional rodent models of schizophrenia and other neuropsychiatric diseases.</p> <p>Abilify is marketed by Bristol-Myers Squibb Co. and Otsuka Pharmaceutical Co. Ltd. to treat depression, bipolar disorder and schizophrenia.</p> <p>SciBX 4(44); doi:10.1038/scibx.2011.1245 Published online Nov. 10, 2011</p>	Compounds patented by The University of North Carolina at Chapel Hill; university is in licensing talks with an undisclosed pharma company	<p>Allen, J.A. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online Oct. 24, 2011; doi:10.1073/pnas.1104807108</p> <p>Contact: Jian Jin, The University of North Carolina at Chapel Hill, Chapel Hill, N.C. e-mail: jianjin@email.unc.edu</p> <p>Contact: Bryan L. Roth, same affiliation as above e-mail: bryan_roth@med.unc.edu</p>