

THE DISTILLERY

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Neurology				
Cognitive dysfunction	NMDAR	<i>In vitro</i> and mouse studies suggest 24(<i>S</i>) hydroxycholesterol (24(<i>S</i>)-HC) could help treat cognitive dysfunction. In screening studies using patch-clamp recordings on mouse hippocampal neurons, 24(<i>S</i>)-HC was selected from a panel of sterol-based compounds as a potent submicromolar potentiator of NMDAR-mediated currents. In mouse hippocampal slices, 24(<i>S</i>)-HC produced long-term potentiation (LTP) from a subthreshold tetanus stimulus and reversed NMDAR antagonist–induced LTP suppression. In behavioral memory tests in mice, a 24(<i>S</i>)-HC analog reversed NMDAR agonist suppression of memory-dependent activity. Next steps are being performed by Sage Therapeutics Inc. and include optimizing 24(<i>S</i>)-HC analogs in models of schizophrenia.	Patent application filed by Sage Therapeutics; licensing information available from Sage Therapeutics Contact : Jeff Jonas, Sage Therapeutics Inc., Cambridge, Mass. e-mail: jeff@sagerx.com	Paul, S.M. <i>et al. J. Neurosci.</i> ; published online Oct. 30, 2013; doi:10.1523/JNEUROSCI.2619-13.2013 Contact: Steven M. Paul, Weill Cornell Medical College, New York, N.Y. e-mail: smpaulmd@med.cornell.edu
		C = (D) C(40) = 1 = 140 4000 /= = 16.1 0040 4000		

SciBX 6(48); doi:10.1038/scibx.2013.1395 Published online Dec. 19, 2013