This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Neurology				
Stroke	NMDAR	<p><i>In vitro</i> and mouse studies have identified a hydrogen sulfide (H₂S)-releasing NMDAR antagonist that could help treat stroke. H₂S is neuroprotective but can be neurotoxic at higher concentrations due in part to NMDAR activation. In human neuroblastoma cells and murine primary cortical neurons subjected to oxygen-glucose deprivation followed by reoxygenation, S-memantine, a compound that combines a slow-releasing H₂S donor and the NMDAR antagonist memantine, increased viability compared with either parent compound alone. In a mouse model of global cerebral ischemia and reperfusion, S-memantine decreased infarct volume and increased survival and neurological function compared with either parent compound. Next steps include synthesizing more candidate compounds.</p> <p>Forest Laboratories Inc., H. Lundbeck A/S, Daiichi Sankyo Co. Ltd. and Merz GmbH & Co. KGaA market Axura memantine to treat Alzheimer's disease (AD).</p> <p>SciBX 5(31); doi:10.1038/scibx.2012.820 Published online Aug. 9, 2012</p>	Patent application filed covering new compound; available for licensing	<p>Marutani, E. <i>et al. J. Biol. Chem.</i>; published online July 19, 2012; doi:10.1074/jbc.M112.374124</p> <p>Contact: Fumito Ichinose, Massachusetts General Hospital, Charlestown, Mass. e-mail: fichinose@partners.org</p>