

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Neurology				
Spinal cord injury (SCI)	Reticulon 4 (RTN4; NOGO-A; NOGO); myelin-associated glycoprotein (MAG); oligodendrocyte myelin glycoprotein (OMG; OMGP); reticulon 4 receptor (RTN4R; NGR)	<i>In vitro</i> and mouse studies suggest that simultaneous inhibition of MAG, OMGP and NOGO-A could help improve recovery after SCI. In cultured neurons, exposure to myelin extracts from mice lacking Nogo-A, Mag and Omgp resulted in more neurite outgrowth than exposure to myelin extracts from mice lacking Mag and Omgp, mice lacking Nogo-A or wild-type mice. In a mouse SCI model, animals lacking Nogo-A, Omgp and Mag had better spinal axon growth and locomotion than wild-type mice or mice deficient in one or two of the proteins. Next steps include pharmacokinetic and toxicology studies of RTN4R decoy proteins that block all three myelin ligands. Novartis AG's ATI355, an antibody against NOGO-A, is in Phase I testing to treat SCI	Use of RTN4R decoys to improve neurological recovery patented; RTN4R decoys licensed by Axerion Therapeutics Inc.	Cafferty, W.B.J. <i>et al. J. Neurosci.</i> ; published online May 19, 2010; doi:10.1523/JNEUROSCI.6239-09.2010 Contact: Stephen M. Strittmatter, Yale University, New Haven, Conn. e-mail: stephen.strittmatter@yale.edu
		SciBX 3(21); doi:10.1038/scibx.2010.659 Published online May 27, 2010		