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THE DISTILLERY

This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Neurology				
Spinal cord injury (SCI)	Paired immunoglobin-like receptor-β (PILRB; PIRB); reticulon 4 (RTN4; NOGO-A); Myelin-associated glycoprotein (MAG; SIGLEC-4A)	Studies in cell culture suggest that inhibiting PIRB maybe useful for treating nerve damage associated with SCI. Multiple myelin-associated ligands can inhibit neurite growth by binding to neuron surface receptors. In an *in vitro* binding assay, PIRB bound two myelin-associated growth inhibitory ligands: NOGO66, an extracellular loop of NOGO-A, and MAG. In murine cerebellar granule neurons grown in the presence of an inhibitory myelin substrate, an anti-Pirb antibody significantly increased neurite growth compared with that seen in untreated controls ($p<0.01$). Improved neurite growth was also seen in cultured neurons from mice carrying a loss-of-function *Pirb* allele. Next steps include Pirb knockout in animal models of SCI. ATI355, an anti-NOGO-A mAb from Novartis AG, is in Phase I testing to treat SCI. ***SciBX*** **1(42); doi:10.1038/scibx.2008.1027** **Published online Nov. 20, 2008**	Findings patented by Genentech Inc.	Atwal, J.K. *et al. Science*; published online Nov. 7, 2008; doi:10.1126/science.1161151 **Contact:** Marc Tessier-Lavigne, Genentech, South San Francisco, Calif. e-mail: marctl@gene.com