

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Neurology				
Nerve injury	Calpastatin; calpain	<p><i>In vitro</i> and mouse studies suggest calpastatin, an inhibitor of the proteinase calpain, could help treat nerve injury. In cultured mouse dorsal root ganglion (DRG) explants, lentiviral-mediated overexpression of calpastatin decreased injury-induced nerve degeneration compared with overexpression of a control gene. In nerve growth factor (NGF)-deprived mouse DRG cells, shRNA knockdown of calpastatin accelerated axon degeneration. In a mouse model of optic nerve injury, adenoviral-mediated overexpression of calpastatin in injured retinal ganglion cells decreased the rate of nerve degeneration compared with overexpression of a control gene. Next steps could include testing calpastatin in additional models of nerve injury and optimizing its delivery.</p> <p>The study was supported in part by the Genentech Inc. unit of Roche.</p> <p>SciBX 7(1); doi:10.1038/scibx.2014.27 Published online Jan. 9, 2014</p>	Unpatented; licensing status not applicable	<p>Yang, J. <i>et al. Neuron</i>; published online Nov. 7, 2013; doi:10.1016/j.neuron.2013.08.034 Contact: Marc Tessier-Lavigne, The Rockefeller University, New York, N.Y. e-mail: marctl@rockefeller.edu</p>