This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Neurology				
Spinal cord injury (SCI)	Matrix metalloproteinase 9 (MMP9)	<p><i>In vitro</i> and mouse studies suggest that MMP9 could be targeted to prevent glial scar formation during spinal cord wound healing. In mouse SCI models, <i>MMP9</i> knockout led to less severe glial scar formation and lower expression of chondroitin sulfate proteoglycans than that seen in wild-type mice ($p < 0.05$). In a scratch wound assay, <i>MMP9</i> knockout astrocytes or wild-type astrocytes treated with an <i>MMP9</i> inhibitor migrated less than wild-type controls, indicating that <i>MMP9</i> is necessary for the astrocyte migration that leads to scar formation. Further studies are necessary to determine the long-term effects of eliminating <i>MMP9</i> in mice with various severe injuries and to identify an effective way to eliminate the protein.</p> <p>SciBX 2(2); doi:10.1038/scibx.2009.69 Published online Jan. 15, 2009</p>	Findings unpatented; unavailable for licensing	<p>Hsu, J. <i>et al. J. Neurosci.</i>; published online Dec. 10, 2008; doi:10.1523/JNEUROSCI.2287-08.2008</p> <p>Contact: Jung-Yu C. Hsu, National Cheng Kung University College of Medicine, Tainan, Taiwan e-mail: jungyu.hsu@gmail.com</p>