

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Neurology				
Spinal cord injury (SCI)	Phosphatase and tensin homolog (PTEN; MMAC1; TEP1); tuberous sclerosis 1 (TSC1)	<p>Studies in mice suggest that PTEN inhibitors could be useful for promoting axon regeneration and treating SCI. PTEN negatively regulates cell growth by blocking downstream mTOR-mediated protein synthesis. In mice with conditional <i>Pten</i> knockout in retinal ganglion cells, there was greater neuronal survival and axon regeneration following optic nerve injury compared with what was seen in wild-type mice. Also in mouse retinal ganglion cells, conditional knockout of <i>Tsc1</i>, a downstream Pten effector, promoted cell survival and axon regeneration. Next steps include studying PTEN inhibition in rodent models of SCI.</p> <p>SciBX 1(42); doi:10.1038/scibx.2008.1028 Published online Nov. 20, 2008</p>	Findings patented; licensing status undisclosed	<p>Park, K. <i>et al. Science</i>; published online Nov. 7, 2008; doi:10.1126/science.1161566 Contact: Zhigang He, Harvard Medical School, Boston, Mass. e-mail: zhigang.he@childrens.harvard.edu</p>