

### This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
<b>Autoimmune disease</b>				
Multiple sclerosis (MS)	Tubulin $\beta$ 4 (TUBB4)	<p>Studies in human brain tissue and in rats suggest that TUBB4 is a marker that can identify cells that could be used to treat MS. In adult human brain tissue, an antibody against TUBB4 bound to neuroectodermal cells in the subventricular zone. In cell culture, Tubb4-positive cells isolated from rat brains proliferated into a range of glial cell types including myelin-producing oligodendrocytes. In rat brains, implantation of cultured Tubb4-positive cells led to higher levels of new myelin deposition than implantation of conventional oligodendrocyte precursor cells. Next steps include isolating and culturing TUBB4-positive cells from human embryonic tissue.</p> <p><b>SciBX 2(26); doi:10.1038/scibx.2009.1032</b>  <b>Published online July 9, 2009</b></p>	<p>Patented; available for licensing; Vertex Pharmaceuticals Inc. has a nonexclusive license for use of TUBB4-expressing cells</p>	<p>Wu, C. <i>et al. J. Neurosci.</i>; published online June 17, 2009; doi:10.1523/JNEUROSCI.1027-09.2009</p> <p><b>Contact:</b> Bruce D. Trapp, Cleveland Clinic, Cleveland, Ohio            e-mail: <a href="mailto:trappb@ccf.org">trappb@ccf.org</a></p>