This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Various				
Multiple sclerosis (MS); nerve damage	BLyS (BAFF); reticulon 4 receptor (RTN4R; NgR)	<p>A study in cell culture suggests that inhibiting BLyS and NgR signaling could be useful for treating MS and preventing nerve degeneration. BLyS levels have previously been shown to be higher in the CNS of MS patients than those seen in healthy controls. In chicken dorsal root ganglion cells, BLyS or an NgR agonist significantly inhibited neurite growth compared with controls ($p < 0.0001$). Inhibition of NgR reversed BLyS-mediated suppression of neuron outgrowth. Next steps include evaluating BLyS antagonists in mouse models of experimental autoimmune encephalitis (EAE).</p> <p>LymphoStat-B belimumab, a human anti-BLyS mAb from Human Genome Sciences Inc. and GlaxoSmithKline plc, is in Phase III testing to treat lupus.</p> <p>Atacicept, a soluble fusion protein that targets BLyS, is in Phase II for MS and rheumatoid arthritis (RA) and Phase I for hematological malignancies. Merck KGaA has exclusive rights to the compound under a deal with ZymoGenetics Inc.</p> <p>At least two other companies have BLyS antagonists in Phase I testing for lupus.</p> <p>SciBX 2(20); doi:10.1038/scibx.2009.845 Published online May 21, 2009</p>	Patent cooperation treaty patent filed covering use in multiple indications including MS and neural injury; not yet available for licensing	<p>Zhang, L. <i>et al. J. Neurosci.</i>; published online May 13, 2009; doi:10.1523/JNEUROSCI.5040-08.2009</p> <p>Contact: Jian Zhang, Chinese Academy of Sciences, Beijing, China e-mail: jianzhang84@genetics.ac.cn</p>