This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Inflammation				
Inflammation	Nav1.6 (PN4; SCN8A)	<i>In vitro</i> and mouse studies identified a Nav1.6 inhibitor that could help treat optic neuritis, which is often an initial sign of multiple sclerosis (MS). A series of voltage-dependent sodium channel modulators was designed based on an indazolyloxadiazolyl scaffold. In rat hippocampal slices, the optimal inhibitor targeting Nav1.6 bound the channel with an IC ₅₀ value of about 13 μ M and produced about 47% neuroprotection at 50 μ M under oxygen-glucose deprivation conditions. In a mouse model of MS, the inhibitor prevented loss of retinal nerve cells and decreased optic neuritis symptoms compared with vehicle. Next steps could include testing the inhibitor in additional preclinical models of optic neuritis or MS.	Patent and licensing status unavailable	Browne, L. <i>et al. J. Med. Chem.</i> ; published online March 6, 2014; doi:10.1021/jm401881q Contact: David L. Selwood, University College London, London, U.K. e-mail: d.selwood@ucl.ac.uk
SciBX 7(16); doi:10.1038/scibx.2014.464 Published online April 24, 2014				