This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Neurology				
Diabetic neuropathy	Methylglyoxal; NaV1.8 (PN3; SCN10A)	<p>Human and mouse studies suggest inhibiting the metabolite methylglyoxal could help treat hyperalgesia in diabetic neuropathy. Type 2 diabetes patients with pain had greater plasma levels of methylglyoxal than type 2 diabetes patients with no pain or healthy controls. In diabetic and methylglyoxal-treated healthy mice, the metabolite modified Scn10a in nociceptive neurons to increase excitability, which in turn increased thermal and mechanical hypersensitivity compared with what was seen in untreated healthy controls and <i>Scn10a</i> knockdown mice. In the diabetic and methylglyoxal-treated healthy mice, a methylglyoxal-scavenging peptide decreased thermal and mechanical hypersensitivity compared with an inactive control peptide. Ongoing work includes testing the methylglyoxal-scavenging peptide in additional animal models of diabetes.</p> <p>SciBX 5(21); doi:10.1038/scibx.2012.557 Published online May 24, 2012</p>	Patented; unlicensed	<p>Bierhaus, A. <i>et al. Nat. Med.</i>; published online May 13, 2012; doi:10.1038/nm.2750 Contact: Peter P. Nawroth, Heidelberg University Hospital, Heidelberg, Germany e-mail: peter.nawroth@med.uni-heidelberg.de</p>