This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Neurology				
Pain	NADPH oxidase 4 (NOX4)	<p>Mouse studies suggest NOX4 inhibitors could help treat neuropathic pain. In mouse models of peripheral nerve injury-induced neuropathic pain, <i>Nox4</i> knockout decreased hypersensitivity to mechanical stimuli compared with wild-type <i>Nox4</i> expression. Postinjury sciatic nerve tissue from <i>Nox4</i> knockout models had higher levels of reactive oxygen species and showed greater demyelination than nerve tissue from wild-type controls. Planned work includes testing NOX4 inhibitors in animal models of neuropathic pain. Genkyotex S.A. has GKT137831, a dual NOX1 and NOX4 inhibitor, in Phase I testing to treat diabetic nephropathy and in preclinical testing to treat pulmonary fibrosis.</p> <p>SciBX 5(30); doi:10.1038/scibx.2012.792 Published online Aug. 2, 2012</p>	Patented by Goethe University Frankfurt; available for licensing or partnering	<p>Kallenborn-Gerhardt, W. <i>et al. J. Neurosci.</i>; published online July 25, 2012; doi:10.1523/JNEUROSCI.6227-11.2012</p> <p>Contact: Achim Schmidtke, Goethe University Frankfurt, Frankfurt, Germany e-mail: schmidtke@em.uni-frankfurt.de</p>