This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Cardiovascular disease				
Ischemia; reperfusion injury	Superoxide dismutase 2, mitochondrial (SOD2); signal transducer and activator of transcription 3 (STAT3)	Studies in primary cell culture and in mice suggest that STAT3 agonists could prevent brain damage after cerebral ischemia. In a mouse model of cerebral ischemia, reperfusion resulted in the downregulation of SOD2 and STAT3 in cortical neurons. In murine cortical neuron cultures, STAT3 knockdown led to accumulation of superoxide in mitochondria and apoptosis. In mouse models of ischemic reperfusion, mice given a STAT3 inhibitor showed greater neuronal cell death and brain damage than untreated controls. Next steps could include identification of STAT3 agonists.	Patent and licensing status unavailable	Jung, J. <i>et al. J. Neurosci.</i> ; published online May 27, 2009; doi:10.1523/JNEUROSCI.11110- 09.2009 Contact: Yuet Wai Kan, University of California, San Francisco, Calif. e-mail: yw.kan@ucsf.edu
SciBX 2(22); doi:10.1038/scibx.2009.909 Published online June 4, 2009				