This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Neurology				
Stroke	Arachidonate 15-lipoxygenase (ALOX15; 15-LOX)	<p><i>In vitro</i> and mouse studies suggest a new class of ALOX15 inhibitors could help treat stroke. Chemical synthesis and <i>in vitro</i> testing of oxazole-4-carbonitrile analogs identified a lead compound that inhibited ALOX15 with a nanomolar IC₅₀ value. In a mouse neuron-based assay of Alox15-mediated oxidative stress, the lead compound caused a dose-dependent decrease in cell death compared with no treatment. In mouse models of ischemic stroke, i.p. injection of the lead compound two hours after ischemia decreased infarct size compared with vehicle injection. Ongoing work includes optimizing the lead compound and testing it in additional mouse models of stroke and other cerebrovascular diseases.</p> <p>SciBX 7(17); doi:10.1038/scibx.2014.499 Published online May 1, 2014</p>	Patent application filed by Massachusetts General Hospital; available for licensing	<p>Holman, T.R. <i>et al. J. Med. Chem.</i>; published online March 31, 2014; doi:10.1021/jm401915r</p> <p>Contact: Klaus van Leyen, Harvard Medical School, Charlestown, Mass. e-mail: klaus_vanleyen@hms.harvard.edu</p> <p>Contact: David J. Maloney, National Institutes of Health, Bethesda, Md. e-mail: maloneyd@mail.nih.gov</p> <p>Contact: Theodore Russell Holman, University of California, Santa Cruz, Calif. e-mail: tholman@chemistry.ucsc.edu</p>