This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Neurology				
Pain	Monoglyceride lipase (MGLL; MAGL)	<p><i>In vitro</i> and <i>in vivo</i> studies identified highly selective MAGL inhibitors that could be useful for treating pain. <i>In vitro</i>, the carbamate compound JZL184 inhibited MAGL with an IC₅₀ of 8 nM and had 500-fold higher selectivity for MAGL than for the related enzyme fatty acid amide hydrolase (FAAH). In three different mouse models of acute pain, JZL184 lowered pain behaviors compared with the effect of vehicle control. The compound also promoted hypothermia and hypomotility in the mice. Next steps include solving the cocrystal structure of MAGL bound to JZL184 to improve the compound's properties and developing derivatives of the compound.</p> <p>Pfizer Inc. has FAAH inhibitors in preclinical development to treat pain.</p> <p>Evotec AG is developing FAAH inhibitors to treat pain.</p> <p>SciBX 1(45); doi:10.1038/scibx.2008.1112 Published online Dec. 18, 2008</p>	Patent pending on research; licensing status undisclosed	<p>Long, J. <i>et al. Nat. Chem. Biol.</i>; published online Nov. 23, 2008; doi:10.1038/nchembio.129</p> <p>Contact: Benjamin F. Cravatt, The Scripps Research Institute, La Jolla, Calif. e-mail: cravatt@scripps.edu</p>