

### This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
<b>Endocrine/metabolic disease</b>				
Dyslipidemia; metabolic disease	Patatin-like phospholipase domain containing 2 (PNPLA2; ATGL)	<i>In vitro</i> and mouse studies have identified an inhibitor of ATGL that might help treat dyslipidemia and metabolic disorders. Lead optimization of lipase inhibitors yielded a compound that inhibited ATGL with an IC <sub>50</sub> of about 700 nM. In lysates from ATGL-overexpressing <i>Escherichia coli</i> and mouse white adipose tissue, the ATGL inhibitor decreased triglyceride hydrolase activity compared with vehicle. In fasted mice, the inhibitor produced a time- and concentration-dependent decrease in the release of fatty acids and glycerol compared with vehicle. Next steps include optimizing the inhibitor for human ATGL and testing it in diet-induced models of metabolic disease.	Patent application filed; available for licensing	Mayer, N. <i>et al. Nat. Chem. Biol.</i> ; published online Oct. 6, 2013; doi:10.1038/nchembio.1359 <b>Contact:</b> Rolf Breinbauer, Graz University of Technology, Graz, Austria e-mail: <a href="mailto:breinbauer@tugraz.at">breinbauer@tugraz.at</a> <b>Contact:</b> Robert Zimmermann, same affiliation as above e-mail: <a href="mailto:robert.zimmermann@uni-graz.at">robert.zimmermann@uni-graz.at</a>
		<b>SciBX 6(46); doi:10.1038/scibx.2013.1321</b> Published online Dec. 5, 2013		