This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Endocrine disease				
Diabetes	G protein–coupled receptor 120 (GPR120)	*In vitro* and mouse studies suggest that GPR120 agonists such as ω-3 fatty acids could help treat insulin resistance and obesity. In macrophages and monocytes, stimulation of GPR120 with ω-3 fatty acids decreased chemically induced inflammatory responses compared with no stimulation. In adipocytes, ligand activation of GPR120 increased glucose uptake compared with small interfering RNA–mediated knockout of GPR120. In wild-type mice fed a high-fat diet, ω-3 fatty acids inhibited inflammation and reversed the loss of insulin sensitivity compared with those in Gpr120 knockout mice. Next steps include mapping out phosphorylation sites and generating the crystal structure of GPR120, as well as further characterization of the mechanisms responsible for the positive effects of GPR120 activation. GlaxoSmithKline plc markets Lovaza, a fish oil extract of ω-3 fatty acids, as an adjunct to diet to reduce serum triglyceride levels in patients with hypertriglyceridemia. ***SciBX*** **3(37); doi:10.1038/scibx.2010.1118** **Published online Sept. 23, 2010**	Patent application filed covering GPR120 activation for diabetes and metabolic diseases; available for licensing from the University of California, San Diego Technology Transfer Office	Oh, D.Y. *et al. Cell*; published online Sept. 2, 2010; doi:10.1016/j.cell.2010.07.041 **Contact:** Jerrold M. Olefsky, University of California, San Diego, La Jolla, Calif. e-mail: jolefsky@ucsd.edu

Copyright © 2010 Nature Publishing Group