This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Endocrine disease				
Obesity; syndrome X	Cannabinoid CB_1 receptor; fatty acid amide hydrolase (FAAH); monoacylglycerol lipase (MAGL)	A study in mice suggests that lowering overactive signaling in the peripheral endocannabinoid (EC) system may be useful for treating obesity. Isopropyl dodecylfluorophosphonate (IDFP) increases endogenous EC signaling by inhibiting MAGL and FAAH. In wild-type mice, IDFP treatment increased levels of plasma triglycerides and cholesterol and lowered triglyceride plasma clearance rates compared with what was seen in CB_1 knockout mice. CB_1 antagonists reversed the effects of IDFP on triglyceride clearance. Next steps include developing CB_1 receptor antagonists with fewer psychological side effects and evaluating the long-term effects of lower EC signaling. Acomplia rimonabant, a CB_1 receptor antagonist from sanofi-aventis Group, is marketed in multiple countries outside the U.S. to treat obesity and is in Phase III testing for diabetes, dyslipidemia and atherosclerosis. At least eight other companies have compounds targeting CB_1 in Phase II or earlier to treat obesity and diabetes.	Not patented; licensing status not applicable	Ruby, M.A. *et al. Proc. Natl. Acad. Sci. USA*; published online Sept. 8, 2008; doi:10.1073/pnas.0807232105 **Contact:** Ronald M. Krauss, Children's Hospital Oakland Research Institute, Oakland, Calif. e-mail: rkrauss@chori.org **Contact:** John E. Casida, University of California, Berkeley, Calif. e-mail: ectl@nature.berkeley.edu