

## THE DISTILLERY

## This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Endocrine disease				
Diabetes	G protein-coupled bile acid receptor 1 (GPBAR1; TGR5)	High throughput screening and canine studies identified TGR5 agonists that could help treat type 2 diabetes. Compounds targeting TGR5 increase levels of glucagon-like peptide-1 (GLP- 1), which enhances insulin action. A screen of a GlaxoSmithKline plc chemical library identified isoxazole carboxamide derivatives that inhibited TGR5. Optimization of the derivatives led to two inhibitors that improved GLP-1 secretion in dogs when coadministered with glucose. GSK's next steps could include testing the compounds in additional models of diabetes. Intercept Pharmaceuticals Inc.'s INT-777, a TGR5 agonist, is in preclinical testing to treat diabetes and obesity.	Patent and licensing status unavailable	Evans, K. <i>et al. J. Med. Chem.</i> ; published online Nov. 10, 2009; doi:10.1021/jm901434t <b>Contact:</b> Karen A. Evans, GlaxoSmithKline plc, Collegeville, Pa. e-mail: karen.a.evans@gsk.com

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