This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Endocrine/metabolic disease				
Diabetes	Glucokinase (GCK; GK); glucokinase regulator (GCKR; GKR)	<p><i>In vitro</i> and mouse studies identified compounds that could help treat type 2 diabetes by binding GKR and disrupting its interaction with GK. A high throughput screen and additional structural optimization identified a compound that bound GKR and promoted the disassociation of the GK-GKR complex with an IC₅₀ of 7 nM. In three diabetic mouse models, a structurally related compound decreased blood glucose levels compared with vehicle. The compound did not reduce glucose levels in normal mice. Next steps include studying the effect of these compounds on the metabolic physiology of the liver.</p> <p>At least nine companies have GK activators in Phase II or earlier development to treat type 2 diabetes. In October, Amgen Inc. returned rights to the GK activator ARRY-403 (formerly AMG151) to Array BioPharma Inc. The compound had completed Phase II testing in type 2 diabetes.</p> <p>SciBX 6(45); doi:10.1038/scibx.2013.1291 Published online Nov. 21, 2013</p>	Patent application filed; licensing status undisclosed	<p>Lloyd, D.J. <i>et al. Nature</i>; published online Nov. 13, 2013; doi:10.1038/nature12724</p> <p>Contact: David J. Lloyd, Amgen Inc., Thousand Oaks, Calif. e-mail: dlloyd@amgen.com</p> <p>Contact: Clarence Hale, same affiliation as above e-mail: chale@amgen.com</p>