This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Endocrine/metabolic disease				
Diabetes	Pancreatic and duodenal homeobox 1 (PDX1; IPF1)	<i>In vitro</i> studies identified a small molecule that increases PDX1 expression and could help treat diabetes. In a gene expression assay using human pancreatic ductal adenocarcinoma cells, high throughput screening identified a glucose-based synthetic compound that increased PDX1 expression compared with vehicle and induced insulin production. DNA methylation and gene profiling studies showed that the compound induced histone modifications at the <i>PDX1</i> gene and expression of the forkhead box A2 (FOXA2) transcription factor, both resulting in elevated PDX1 expression. Next steps include testing whether the resulting insulin-producing cells could replace β cells in an animal model of diabetes.	Unpatented; unavailable for licensing	Yuan, Y. <i>et al. Chem. Biol.</i> ; published online Nov. 27, 2013; doi:10.1016/j.chembiol.2013.10.013 Contact: Bridget K. Wagner, Broad Institute of MIT and Harvard, Cambridge, Mass. e-mail: bwagner@broadinstitute.org
SciBX 7(2); doi:10.1038/scibx.2014.55 Published online Jan. 16, 2014				