This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cardiovascular disease				
Coronary artery disease (CAD)	UDP-N-acetyl- α -D-galactosamine:polypeptide N-acetylglucosaminyltransferase 2 (GALNT2); protein phosphatase 1 regulatory subunit 3B (PPP1R3B); tetratricopeptide repeat domain 39B (TTC39B)	<p>A meta-analysis of human genomewide association studies identified 95 gene variants that could help treat hyperlipidemia and CAD or predict risk of the conditions. Genetic analysis of over 100,000 individuals of European descent showed significant associations between serum lipid levels and 95 SNP-associated genes ($p < 5 \times 10^{-8}$). Fourteen of the identified SNPs correlated with CAD risk ($p < 0.001$). In mice, small hairpin RNA-mediated knockdown of <i>Galnt2</i> or <i>Ttc39b</i>, two candidate genes associated with high-density lipoprotein (HDL), led to greater HDL cholesterol levels than normal expression of the genes. In mice, overexpression of a third gene, <i>Ppp1r3b</i>, led to lower HDL cholesterol levels than those in controls. Next steps include mechanistic studies of the candidate genes in animal models of metabolic and cardiovascular disease.</p> <p>SciBX 3(32); doi:10.1038/scibx.2010.985 Published online Aug. 19, 2010</p>	Findings unpatented; all 95 SNPs available in public domain	<p>Teslovich, T.M. <i>et al. Nature</i>; published online Aug. 5, 2010; doi:10.1038/nature09270</p> <p>Contact: Sekar Kathiresan, Massachusetts General Hospital, Boston, Mass. e-mail: skathiresan@partners.org</p>