

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cardiovascular disease				
Cardiovascular disease	Apolipoprotein C-III (APOCIII; APOC3)	<p>Human sample studies suggest <i>APOC3</i> mutations could help predict the risk of developing cardiovascular disease and that the gene may be a therapeutic target. In a cohort of 3,734 individuals, loss-of-function mutations in <i>APOC3</i> correlated with ~40% lower plasma triglyceride levels and 40% reduced risk of coronary heart disease compared with wild-type <i>APOC3</i>. In a cohort of 75,725 individuals, nonfasting triglyceride levels <1.0 mM correlated with a decreased incidence of cardiovascular disease compared with levels >4.0 mM. In the same cohort, a heterozygous, loss-of-function mutation in <i>APOC3</i> was associated with reduced triglyceride levels. Next steps could include testing whether lowering APOC3 or triglyceride levels can lower risk for cardiovascular disease. Isis Pharmaceuticals Inc. has ISIS-APOCIIIrx, an antisense inhibitor of <i>APOC3</i>, in Phase II testing to treat hypertriglyceridemia.</p> <p>SciBX 7(30); doi:10.1038/scibx.2014.892 Published online Aug. 7, 2014</p>	Patent and licensing status unknown for findings from both studies	<p>TG and HDL Working Group of the Exome Sequencing Project, National Heart, Lung, and Blood Institute. <i>N. Engl. J. Med.</i>; published online June 18, 2014; doi:10.1056/NEJMoa1307095 Contact: Sekar Kathiresan, Massachusetts General Hospital, Boston, Mass. e-mail: skathiresan@partners.org</p> <p>Jørgensen, A.B. <i>et al. N. Engl. J. Med.</i>; published online June 18, 2014; doi:10.1056/NEJMoa1308027 Contact: Anne Tybjærg-Hansen, Copenhagen University Hospital, Copenhagen, Denmark e-mail: anne.tybjærg.hansen@regionh.dk</p>