

This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Cardiovascular disease				
Atherosclerosis	Peroxisome proliferation-activated receptor- γ (PPARG; PPAR γ); myeloid-lymphoma or mixed-lineage 5 (MLL5); 5'-3' exoribonuclease 2 (XRN2)	<i>In vitro</i> and mouse studies suggest activating genes involved in the plasma cholesterol-lowering response could help treat atherosclerosis. In a mouse model of atherosclerosis with elevated low-density lipoprotein levels, blocking hepatic synthesis of lipoproteins to lower plasma cholesterol induced regression of plaques and stimulated different gene expression networks controlled by PPAR γ in early stages of plaque expansion and by MLL5 and XRN2 in later stages. In an <i>in vitro</i> model of atherosclerosis, knockdown of these individual regulatory transcription factors increased cholesterol esterase accumulation by 12%–21%. Next steps include validating the role of the regulatory genes in plaque formation.	Findings unpatented; licensing status not applicable	Björkegren, J.L.M. <i>et al. PLoS Genet.</i> ; published online Feb. 27, 2014; doi:10.1371/journal.pgen.1004201 Contact: Josefin Skogsberg, Karolinska Institute, Stockholm, Sweden e-mail: josefin.skogsberg@ki.se
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