

Extremely low LDL cholesterol, friend or foe?

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Abstract

LDL-C is causal and cumulative. Genetic and epidemiological studies show a log linear relationship between cardiovascular risk and absolute differences in LDL-C. Trials of lipid lowering therapies show a similar log linear relationship between risk and LDL-C difference.

In nature among those with PCSK9 gene mutations or abetalipoproteinaemia risk of CAD is extremely low. Trials of statins, ezetimibe, and PCSK9 have not shown any relationship between reductions in LDL-C and adverse cardiovascular outcomes in particular stroke risk is lower. In observational studies from trials lower appears to be safe and beneficial from a cardiovascular standpoint when all is safe.

Keywords

LDL-C, genetics, statins, ezetimibe, PCSK9, safety, efficacy