

# Review of: "Why Non-HDL Cholesterol is Preferred over Apolipoprotein B-100 (Apo B)"

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**Potential competing interests:** No potential competing interests to declare.

In their paper „Why Non-HDL Cholesterol is Preferred over Apolipoprotein B-100 (Apo B)“ the authors investigate in a cohort of 376 male individuals undergoing coronary angiography whether Apo B or non-HDL cholesterol is a better predictor of coronary artery disease. They conclude that non-HDL cholesterol should be the preferred lipid marker when assessing cardiovascular risk.

The paper is well-written and the rationale is well explained. Also, the statistical analysis seems basically sound.

A major shortcoming of the study is the fact that coronary vascular disease is assessed at a single time point. It is well possible that patients develop atherosclerosis at a later time point.

Also, the definition of “significant” ASCVD as identified by coronary angiography may in some cases not be ideal as plaque development is initially not accompanied by lumen loss (Glagov phenomenon). In these cases, IVUS or coronary CT may be more suitable to identify early stages of disease.

Most importantly, it remains unclear how the authors define “coronary risk”/“cardiovascular risk” – do they mean atherosclerotic coronary vascular disease (ASCVD)? If they mean “risk”, outcome data such as major adverse cardiovascular events need to be assessed prospectively.

Minor comments:

A table depicting the demographic and clinical data of patients would be helpful.

Table 1 needs a more precise legend.