

Abstract

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Apolipoprotein B and cardiovascular disease risk: position statement from the AACC Lipoproteins and Vascular Diseases Division Working Group on Best Practices.

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BACKGROUND: Low-density lipoprotein cholesterol (LDL-C) has been the cornerstone measurement for assessing cardiovascular risk for nearly 20 years.

CONTENT: Recent data demonstrate that apolipoprotein B (apo B) is a better measure of circulating LDL particle number (LDL-P) concentration and is a more reliable indicator of risk than LDL-C, and there is growing support for the idea that addition of apo B measurement to the routine lipid panel for assessing and monitoring patients at risk for cardiovascular disease (CVD) would enhance patient management. In this report, we review the studies of apo B and LDL-P reported to date, discuss potential advantages of their measurement over that of LDL-C, and present information related to standardization.

CONCLUSIONS: In line with recently adopted Canadian guidelines, the addition of apo B represents a logical next step to National Cholesterol Education Program Adult Treatment Panel III (NCEP ATP III) and other guidelines in the US. Considering that it has taken years to educate physicians and patients regarding the use of LDL-C, changing perceptions and practices will not be easy. Thus, it appears prudent to consider using apo B along with LDL-C to assess LDL-related risk for an interim period until the superiority of apo B is generally recognized.

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