The Oxidized LDL:HDL Ratio Test (4E6 Antibody) Identifies More Patients with Obstructive Coronary Artery Disease Than The Oxidized Phospholipid:Apolipoprotein B-100 Ratio Test (E06 Antibody)

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Abstract:
By the use of data obtained from two published studies (Johnston et al Am J Cardiol 2006;97:640-645; and Tsimikas et al N Engl J Med 2005;353:46-57), the Oxidized LDL:HDL Ratio Test (4E6 antibody) was compared with the Oxidized Phospholipid:Apo B-100 Ratio Test (E06 antibody) for their ability to discriminate patients with obstructive coronary artery disease (CAD) from patients without CAD. The plasma ratios from both studies consisted of 760 patients with obstructive CAD and 663 patients without CAD; the study of Johnston et al consisted of 490 patients with CAD and 431 patients without CAD; and the study of Tsimikas et al consisted of 270 patients with CAD and 232 patients without CAD. When the ratios of each study were divided into four quartiles, the Oxidized LDL:HDL Ratio Test (4E6 antibody) identified 9%, 40%, 67%, and 94% obstructive CAD patients in quartiles 1-4, respectively, whereas the Oxidized Phospholipid:Apo B-100 Ratio Test (E06 antibody) identified 47%, 51%, 54%, and 63% obstructive CAD patients in quartiles 1-4, respectively. A calculation based on the results from quartile 4, 100(94/63-1) = 49%, demonstrated that the Oxidized LDL:HDL Ratio Test (4E6 antibody) identified 49% more obstructive CAD patients than the Oxidized Phospholipid:Apo B-100 Ratio Test (E06 antibody). In conclusion, the Oxidized LDL:HDL Ratio Test (4E6 antibody) appears to be a significantly better biomarker for identifying patients with obstructive CAD than the Oxidized Phospholipid:Apo B-100 Ratio Test (E06 antibody).

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