

**DYSLIPIDAEMIA
IMPLICATIONS OF NEW
STATIN GUIDELINES**

In November 2013, the ACC and the AHA released new guidelines on the treatment of blood cholesterol to reduce atherosclerotic risk in adults. The recommendations in this document are a substantial departure from those in the Third Adult Treatment Panel (ATP III) of the National Cholesterol Education Program. According to estimates published in *NEJM*, the new ACC/AHA guidelines will result in the number of US adults who are eligible to receive statins increasing by 12.8 million.

Dr Michael Pencina and colleagues were “intrigued by the change in treatment philosophy from that based on cholesterol levels (used by the ATP III guidelines) to one based on 10-year risk of cardiovascular disease (used by the new ACC/AHA guidelines)”. To investigate the practical consequences of this shift, they used a study sample of 3,773 individuals from the US National Health and Nutrition Examination Surveys, and then extrapolated the findings to the general population of 115.4 million US adults aged 40–75 years.

The researchers estimate that 43.2 million US adults (37.5%, 95% CI 35.3–39.7%) were eligible to receive statins under the ATP III guidelines. This number is increased to 56.0 million (48.6%, 95% CI 46.3–51.0%) under the ACC/AHA guidelines. An additional 14.4 million adults become eligible for statins under the new guidelines, whereas 1.6 million who previously qualified no longer do so. The largest increase occurs in individuals aged 60–75 years who do not have cardiovascular disease, but become eligible for statins on the basis of their estimated 10-year risk of a cardiovascular event. In this cohort, the percentage of men eligible for statins increases from 30.4% to 87.4%, and the percentage of women who can receive statins increases from 21.2% to 53.6%.

The investigators estimate that the new guidelines increase the sensitivity (by 16.8 percentage points), but decrease the specificity (by 9.2 percentage points), of statin treatment. According to Dr Pencina, “the benefits of a risk-based approach versus a lipid-level-based approach need a more thorough exploration”. Additionally, “the safety of long-term statin use should be investigated further”.

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Original article Pencina, M. J. *et al.* Application of new cholesterol guidelines to a population-based sample. *N. Engl. J. Med.* doi:10.1056/NEJMoa1315665