Limited evidence for statins in primary prevention of CVD in people at low risk

Clinical question
How effective are statins in the primary prevention of cardiovascular disease (CVD) in people at low risk?

Bottom line
All-cause mortality, coronary heart disease and stroke events were reduced with the use of statins, as was the need for revascularisation. Statin treatment reduced blood cholesterol. Taking statins did not increase the risk of adverse effects, such as cancer. Only limited evidence showed that primary prevention with statins may be cost-effective and improve patient quality of life. Duration of treatment was a minimum of 1 year, with follow-up at a minimum of 6 months. Caution should be taken in prescribing statins for primary prevention among people at low cardiovascular risk (<1% annual all-cause mortality).

Caveat
Selective reporting of outcomes, adverse events and inclusion of people with cardiovascular disease in many of the trials included in previous reviews of the role of statins in primary prevention make the evidence impossible to disentangle without individual patient data. Caution also needs to be taken regarding the fact that all but 1 of the trials had some form of pharmaceutical industry sponsorship. Overall, the populations sampled within this review were white, male and middle-aged. Therefore, caution needs to be taken regarding generalisability to older people who may be at greater risk of side effects, and to women who are at lower risk of CVD events.

Context
CVD is ranked as the number 1 cause of mortality and a major cause of morbidity worldwide. Previous reviews of the effects of statins have highlighted their benefits in people with CVD. The case for primary prevention, however, is less clear.

Cochrane Systematic Review

PEARLS No. 315, June 2011, written by Brian R McAvoy

PEARLS are succinct summaries of Cochrane Systematic Reviews for primary care practitioners – developed by the Cochrane Primary Care Field, New Zealand Branch of the Australasian Cochrane Centre at the Department of General Practice and Primary Health Care, University of Auckland and funded by the New Zealand Guidelines Group. New Zealanders can access the Cochrane Library free via www.nzgg.org.nz

PEARLS provide guidance on whether a treatment is effective or ineffective. PEARLS are prepared as an educational resource and do not replace clinician judgement in the management of individual cases. View PEARLS online at: www.nzdoctor.co.nz; www.nzgg.org.nz; www.cochraneprimarycare.org