Reviewer's report

Title: Socioeconomic and racial/ethnic differentials of C-reactive protein levels: a systematic review of population-based studies

Version: 1 Date: 10 May 2007

Reviewer: Gordon Lowe

Reviewer's report:

General
There is increasing evidence that socioeconomic and racial/ethnic variables are important determinants of cardiovascular risk, and indeed have been added to some cardiovascular risk prediction scores (Woodward et al Heart 2006). Given the increasing number of recent reports of the relationships of these variables to circulating CRP levels, a systematic review is useful and timely. This review has used accepted methodology, and has identified all relevant studies of which I am aware.

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

Many would now question the statements that “CRP has been shown to add to the predictive value of conventional markers…in defining risk for coronary events”; and “the role of CRP as a risk marker is not disputed” (page 5) and “...there is no question that CRP constitutes an excellent marker…that identifies high-risk individuals” (page 21). I suggest the authors reference the most recent systematic review (Danesh et al. N Engl J Med 2004) which reports that CRP is a relatively weak predictor of CHD, and does not add significantly to current risk scores; a finding confirmed in several recent studies.

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Page 23, Line 2.
Because CRP is not an outcome suggest rephrase, e.g. “…..low SEP is independently associated with higher CRP levels, even when....”.

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Discretionary Revisions (which the author can choose to ignore)

It may be useful to note that longitudinal observational studies suggest that smoking and regular exercise are direct determinants of levels of CRP and other inflammatory markers (e.g. Wannamethee et al. Circulation 2002; Wannamethee et al. European Heart Journal 2005)

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.
Declaration of competing interests:

I declare that I have no competing interests.