Reviewer's report

Title: Prostate specific antigen for prostate cancer in a European population: a systematic review

Version: 1 Date: 1 June 2009

Reviewer: Philipp Dahm

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Discretionary Revisions
Title
1. The authors may be able to give this study a more succinct title. I.e. this is a systematic review of the diagnostic accuracy of PSA testing.

Major Compulsory Revisions
Background
2. The introduction of this article has a strong focus on the U.K. Given that this study focuses on a European population, there appears to be a disconnect
3. The background section (as well as much of the manuscript) is very wordy. I don’t think it should be the author’s role to explain to their audience what PSA is, what the role of systematic reviews is and how sensitivity/specificity is defined. This part can be considerably shortened.

Methods
4. The Methods section includes multiple narrative comments such as “Another potential source of bias is the lack of ….Overall, these factors could undermine our results and we should be cautious in our analysis” These do not belong in the methods section in this form.

Findings
5. The results section represents a mish mash of information (for example: last paragraph on page 5) that could be deleted or moved into figure legends, commentaries and discussion.

Discussion
6. The authors should include relevant methodological references, for example when they discuss the significance of publication bias with regards to systematic reviews of studies of diagnostic accuracy
7. The authors discuss that the study results cannot be generalized to a screening setting or a primary care population. They are also limited to Europeans. However, they fail to make a strong point whether their results can be applied in a meaningful way to any patients at all. This section could benefit from some rewording.
8. The authors appropriately performed an assessment of the methodological
quality of the underlying studies. However, the issues identified find minimal reflection in this discussion.

**Level of interest:** An article of importance in its field

**Quality of written English:** Not suitable for publication unless extensively edited

**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.