Reviewer's report

Title: Sodium bicarbonate-based hydration prevents contrast-induced nephropathy: A meta-analysis

Version: 1 Date: 2 March 2009

Reviewer: Rainer Birck

Reviewer's report:

This is a thoroughly conducted systematic review and meta-analysis on a clinical relevant topic. A systematic review stands or falls with its search strategy, and in this case a comprehensive and systematic approach (several data bases, several hand searches, author contact) was chosen by the authors leading to the inclusion of 9 yet unpublished trials. Effect sizes from individual trials were pooled using the conservative random-effects model, and several and well-grounded stratified analyses were performed. The discussion is well-balanced, highlighting both pros and cons of the chosen scientific approach. It is the impression of this reviewer as a nephrologist that this systematic review provides the reader with an excellent qualitative and quantitative clinical overview on this topic and should be left as is. If anything, the results could be shortened by the last two charts which do not really add much information.

Which journal?: Appropriate or potentially appropriate for BMC Medicine: an article of importance in its field

What next?: Accept for publication in BMC Medicine after discretionary revisions

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests' below