Reviewer's report

Title: Polyethylene glycol vs. sodium phosphate for bowel preparation: A treatment arm meta-analysis of randomized controlled trials

Version: 2 Date: 12 October 2010

Reviewer: Mark Korsten

Reviewer's report:

This is a well-written and important contribution that confirms previous studies showing that a sodium phosphate hyperosmotic preparation is superior to polyethylene glycol-based lavage solutions prior to colonoscopy. However, I would point out that the definition of what constitutes an "excellent" prep quality was not a component of the publication selection criteria. In other words, there is no mention of how prep efficacy was assessed. Most studies use some sort of scoring systems but some of these approaches are rather subjective and, therefore, quite unreliable. I would also point out that compliance is rarely an all or none phenomenon. "Failure to complete" a preparation may indicate very little of the material was consumed or, alternatively, could mean that most was ingested, just not 100%. The reviewer is aware that a meta-analysis probably cannot capture these subtleties but I believe it would nevertheless be worth commenting on these issues in the paper.

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:

The reviewer has performed a prospective trial designed to assess the renal toxicity and efficacy of a sodium phosphate(PhosphoSoda)purgative prior to colonoscopy. Provided that subjects had no evidence of renal compromise within one week prior to sodium phosphate administration, renal failure was not noted and the quality of the sodium phosphate preparation was found to be superior to that after PEG. Therefore, although the reviewer is probably somewhat biased from an intellectual standpoint, I can categorically state that I have no other competing interests, including financial, in this matter.