Reviewer's report

Title: Diagnostic and prognostic role of peritoneal CA 125 in peritoneal dialysis patients presenting with acute peritonitis

Version: 2 Date: 12 June 2014

Reviewer: Monica Limardo

Reviewer's report:

In this study Panorchan K. and Davenport A. investigated whether measuring PD CA125 during peritonitis provided additional information in determining outcome of peritonitis.

The topic is interesting, even if it is not new since the hypothesis of a prognostic role of CA 125 was examined in smaller studies in 1990s.

The study is of interest. Minor essential recisions are required to improve the clarity of the manuscript:
- in the Abstract and in the Methods the Authors should clearly define that PD CA125 is CA125 measured in the dialysate effluent. In the Method section the Authors should precise if it was measured in a sample from a standard 2 litre 1.36% glucose peritoneal dialysate instilled for a 4 hour dwell.
- as this was a prospective study, in the Methods section the Authors should state which outcomes were defined in the study design
- in reporting results (both in Abstract and Results section) please distinguish between number of peritonitis episodes and number of patients: 127 (66.8%) first episodes; 151 episodes - not patients.
- a table with outcomes would be useful.

Discretionary revision:
- Discussion: "This would potentially support cell cultures studies.... " in this sentence the Authors give a possible interpretation to the results of a previous cell culture study. I think it is not necessary in this context and this sentence can be removed

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 have no competing interest