Reviewer's report

Title: Trough colistin plasma level is an independent risk factor for nephrotoxicity: a prospective observational cohort study

Version: 5 Date: 23 January 2013

Reviewer: Jason J Pogue

Reviewer's report:

I commend Sorli and colleagues on their revised manuscript as I think it now represents a very solid and important contribution to the literature. My comments, all of which I would consider minor, are listed below:

1) Methods- line 18-20 please describe, or at the very least reference the package insert the renal dosing. The reason that I recommend this is that different products have significantly different renal dosing recommendations

2) Results- page 9 lines 6-8. the percents do not add up to 100. please fix.

3) Results- page 10 line 6-7 states "Cmax and Cmin were higher in those without nephrotoxicity." I assume this should say higher in those with nephrotoxicity

4) Discussion- this one is at the discretion of the authors, but lines 10-13 talk about the differences in toxicity between this study and others, but the difference is negligible and I don't think it is necessary to describe potential reasons for a 4% increase in toxicity

5) Discussion page 12 lines 14-15. I don’t think that it is accurate to compare two different studies and say that there is a dose dependent efficacy. If the authors would like to make the point here that higher doses increase efficacy the should reference either falagas et.al. int j antimicrob agents 2010 35: 194-199 and/or vicari et al. CID 2013 Feb;56(3):398-404

6) all tables: there is no such thing as a pvalue of 0.000- would change all of these to p <0.0001, etc

7) in general the new tables are fantastic. Great work. Very thorough data set now!

8) table 6- excellent table, however it is a bit confusing. I think that either in the table heading or the table itself you need to emphasize that these are day 3 levels and the associated with toxicity on d7 or EOT. If I just look at this table (as some unfortunately will) it appears that these concentrations were drawn on d7 and EOT

Level of interest: An article of importance in its field
Quality of written English: Needs some language corrections before being published

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