Reviewer’s report

Title: Comparison of three multiplex PCR assays for the detection of respiratory viral infections: evaluation of xTAG Respiratory Virus Panel Fast assay, RespiFinder 19 assay and RespiFinder SMART 22 assay

Version: 4 Date: 18 May 2012

Reviewer: Marek Smieja

Reviewer’s report:

The authors have addressed point 1 in part, and point 2 in full. I remain unconvinced that the clinical data showing very high rates of adenovirus and parainfluenza in an adult, non-immunocompromised post-operative population is very believable. Briefly, I think these are likely to be false positives. However, the authors don’t seem to have a method for going back and doing more detailed confirmation. This is frustrating, and I don’t really have anything further to suggest, except to be sceptical and to repeat their study in future. High rates of virus detection in tracheal aspirates would indeed be interesting to clinicians and to clinical laboratories. However, a future study requires much more robust study design (systematic collection, adequate clinical data and outcomes) and methodology (blinded parallel comparison to an appropriate reference standard; culture, two different PCR targets, and sequencing).

Level of interest: An article of limited interest

Quality of written English: Acceptable

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.