Author's response to reviews

Title: Accuracy of IgM antibody testing, FQ-PCR and culture in laboratory diagnosis of acute infection by Mycoplasma pneumoniae in adults and adolescents with community-acquired pneumonia

Authors:

Jiuxin Qu (qujiuxin@163.com)
Li Gu (guliangel@yahoo.com.cn)
Jiang Wu (wij2102@sohu.com)
Jianping Dong (djp1970111@sina.com)
Zenghui Pu (puzenghui80055@163.com)
Yan Gao (gaoyan6384@163.com)
Ming Hu (wadmq@sina.com)
Yongxiang Zhang (zyx1915@yahoo.com.cn)
Feng Gao (nswj@sohu.com)
Bin Cao (caobin1999@gmail.com)
Chen Wang (cyh-birm@263.net)

Version: 3 Date: 19 March 2013

Author's response to reviews: see over
Dear the editor:

Enclosed, please find the revised version of our manuscript entitled "Accuracy of IgM antibody testing, FQ-PCR and culture in laboratory diagnosis of acute infection by Mycoplasma pneumoniae in adults and adolescents with community-acquired pneumonia". In your letter, you encouraged us to revise our manuscript, address the issues raised by the reviewers, and improve the quality of written English.

We have carefully revised the manuscript according to the reviewer’s queries and a point-by-point reply to their comments is provided below. We also have a professional editing for written English from “Edanz”, especially for the abstract. We hope the manuscript will meet the standard of BMC infectious diseases after the professional edition.

We are very grateful to the reviewers again, for the time they spent in reviewing the manuscript and to Editorial Team for reconsidering this work for publication in “BMC Infectious Diseases”.

Yours faithfully,
Bin Cao, M.D.

Point-by-point response to reviewer’s comments:

Reviewer 1:

Minor issues not for publication:

1. In Material and methods: the names of the viruses should not write in cursive (lines 119/120/121/122/123).

Answer: Thank you for the nice suggestions. In the revised edition, we have made the corrections on lines 124/125/126/127.
2. At the beginning of sentences, numbers should be written in extensive: lines 27 and 28 of abstract and lines 210 and 213 of discussion.

Answer: Thank you for the nice suggestions. In the revised edition, the numbers have been corrected on lines 29 and 30 of abstract and lines 222, 223 and 226 of discussion.

3. In the reference section, the names of journals should be in all caps.

Answer: Thank you for the suggestion. The current format of references is according to the style of BMC infectious diseases.

Reviewer 2:
The authors responded well to the reviewer's comment and revised the manuscript.

Answer: Thank you for your nice comments and the time spent in reviewing the manuscript.

Reviewer 3:
After reading the authors’ claim of modification, references and other reviewers’ opinion carefully, my only major concern is its novelty for FQ-PCR results for MP acute infection, which were common methods for community acquired pneumonia patients, even in the developing countries. The other parts of the paper, including data deposition, writing, discussion and conclusions, are OK. If other reviewers and editors have no opposing idea about the novelty of this paper, I keep my opinion and you may decide to let this paper publish on your journal in the current form.

Answer: Thank you for your comments. The FQ-PCR kit we used is real-time PCR based, the gene target of the kit 16S rRNA genes, and the results are expressed as qualitative. The FQ-PCR kit has been approved by State Food and Drug Administration, which is commonly used for CAP patients. However, the sensitivity of kit is not as high as other similar reports (Martinez et al. Journal of medical microbiology 2008, 57(Pt 12):1491-1495. Touati et al. Journal of clinical microbiology 2009, 47(7):2269-2271.). And based on our results, the logical approach would be to incorporate PCR, culture and serological tests for optimum diagnosis of acute M.
pneumoniae infections in adults and adolescents.

Reviewer 4:
The authors have submitted a revised manuscript for their study comparing the performance of IgM, culture and FQ-PCR for *M. pneumoniae* diagnosis.

I thank the authors for their responses to my comments and I am happy with their modifications to the manuscript.

**Answer: We appreciate for all your nice comments and suggestions, which benefit us a lot.**

I have a detailed a few minor comments below regarding content but the main issue is regarding the grammatical errors that remain in the written English, particularly regarding the use of the plural/singular, the use of the past/present tense and the use of articles. I would recommend the authors ensure the manuscript is reviewed for grammar by a native speaker if possible. In its present form it does not flow very well and therefore doesn’t currently meet the language standard of other articles in the journal.

**Answer: Thank you for nice suggestions. We decide to have a professional editing service for the language of the manuscript, especially for the abstract. We hope the manuscript will meet the standard of BMC infectious diseases after the professional edition.**

Minor essential revisions:
Language - as detailed above

**Answer: Thank you for nice suggestions. We decide to have a professional editing service for the language of the manuscript, especially for the abstract. We hope the manuscript will meet the standard of BMC infectious diseases after the professional edition.**

Discretionary revisions:
I suggest the use of intermediate not “mediate”, e.g. line 31, 167.

**Answer: Thank you for your nice suggestion. In the revised edition, “intermediate” has been used on line 34 and 180.**
I note the authors have carried out multiple chi-square tests for the data in Table 1; have the authors corrected for multiple testing and if so, can they add this to the statistical analysis section.

**Answer:** We are sorry for making your misunderstanding. But we did not carry out multiple chi-square tests for data in Table 1. We only conducted comparison between MP and non-MP group. To avoid further misunderstanding, we have added explanation in statistical analysis of “method section” and footnote under the Table 1.

I suggest “QIAmp DNA Mini Kit” rather than the catalogue number 51306.

**Answer:** Thank you for your nice suggestion. In the revised edition, we have replaced catalogue number with “QIAmp DNA Mini Kit”.

I suggest not putting the virus names in italics.

**Answer:** Thank you for the nice suggestion. In the revised edition, we have made the corrections.

I suggest on line 145 “the two groups had a similar pattern of biochemical and haematological findings” rather than “laboratory examinations”.

**Answer:** Thank you for your nice suggestion. In the revised edition, we have replaced “laboratory examinations” with “biochemical and hematological findings”.

I suggest that the sentence on line 174-5 “Based on these findings…” does not really add anything and could be deleted for brevity.

**Answer:** Thank you for the nice suggestion. In the revised edition, the sentence on line 187-9 “Based on these findings, we suggest the selected population is suitable for the analysis of accuracy of laboratory diagnostic methods of *M. pneumoniae pneumonia*.” has been deleted.

The addition of the JRS scoring system is interesting in the discussion but the actual data could be added to the end of the results section e.g. number of cases with JRS score \(\geq 4\) etc in the MP and non-MP groups, in order to give the % sensitivity and specificity referred to in the discussion.

**Answer:** Thank you for the nice suggestion. There are 17 and 40 patients in the
MP and non-MP groups who were scored >=4 by JRS system. In the revised edition, the data have been added on lines 171-173 in results section.

I note that the information regarding the other agents identified in the cohort, as detailed in the author’s response, is not in the manuscript; it could fit in nicely around line 137 in the results section.

Answer: Thank you for the nice suggestion. In the revised edition, detailed information regarding the other agents identified in the defined patients has been added on lines 142-148.