Author’s response to reviews

Title: Diagnosis of mycoplasma pneumoniae by loop-mediated isothermal amplification: systematic review and meta-analysis

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Author’s response to reviews:

Dear Editor,

We have revised this manuscript and especially paid much attention to your comments and suggestions. We would like to re-submit it to BMC Infectious Diseases. First, title of this manuscript has been changed to “Diagnosis of mycoplasma pneumoniae by loop-mediated isothermal amplification: systematic review and meta-analysis” to make it more clear and appropriate. Also, We improve the English in this manuscript, and remove culture as a reference standard.

Answers to reviewer’ questions were as follows:

F Kakuya(Reviewer 1):

1. Question : The author should avoid uncommon abbreviations. Are "SEN" and "SP" commonly known and understood?

Answer : Thank you very much for your advice. We have spelled out all the abbreviation on first use in the manuscript.
2. Question: The author should clearly distinguish bacterial species name "Mycoplasma pneumoniae" and disease name "Mycoplasma pneumonia". Which MP represents "Mycoplasma pneumoniae" or "Mycoplasma pneumonia"?

Answer: Thank you very much. The bacterial name “Mycoplasma pneumoniae” and disease name “Mycoplasma pneumonia” has been clearly distinguished in the manuscript. MP means Mycoplasma pneumoniae.

H Wang (Reviewer 2)

1. Question: The sentence at 16th to 23th is grammatically wrong.

Answer: Thanks very much. The language has been revised.

2. Question: Author mentioned that the rate misdiagnosis is decreased, compared with culture and PCR. How did author come to this conclusion?

Answer: Thank you so much. We think “the rate misdiagnosis is decrease” is not very accurate, so I remove the expression.

3. Question: Author mentioned that the rate misdiagnosis is decreased, compared with culture and PCR. How did author come to this conclusion?

Answer: Thanks very much for your suggestion. The advantages and disadvantages of LAMP for Mycoplasma pneumonia analysis can be summarized as followed: (Advantages) LAMP has some potential advantages, such as high sensitivity, high specificity, a wide detection range, which is comparable to that of PCR, but is simpler in terms of equipment and instruments used. Moreover, LAMP has high throughput that is achieved fast and without dependence on specialized equipment. Meanwhile, the assay is simple to perform; only one-week training is needed even for technicians with no prior molecular analysis experience. Moreover, the result is convenient to observe, the white turbid or green fluorescence can be directly seen by naked eye. (Disadvantage) the overall clinical accuracy of LAMP for the detection of Mycoplasma Pneumoniae has to be further studied. Also, many investigations mentioned that LAMP still has some weaknesses to be overcome. First, LAMP stability is poorer than PCR. Meanwhile, LAMP had a shorter total reaction time.
We hope the revised manuscript is acceptable for publication at BMC Infectious Diseases.

We look forward to hearing from you soon.

Sincerely,

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