Author’s response to reviews

Title: ASSESSMENT OF THORACIC ULTRASOUND IN COMPLEMENTARY DIAGNOSIS AND IN FOLLOW UP OF COMMUNITY-ACQUIRED PNEUMONIA (CAP)

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Author’s response to reviews:

To the Editor of

BMC Medical Imaging

Dear Editor,

Enclosed, find the revised version of our manuscript “Assessment of thoracic ultrasound in complementary diagnosis and in follow up of community-acquired pneumonia (CAP)” (MS # BMIM-D-17-00065R1) with changes highlighted in red characters.

In the enclosed cover letter there are our point-by-point responses to the reviewers’ comments and suggestions.
We hope that, now, the manuscript is suitable for publication.

Best regards

Maria D’Amato, MD

Reply to the Editor’s and reviewers’ comments

Red characters have been used to highlight changes throughout the text.

Editor’s comments

1. Please provide all author email addresses in the title page.
   - A: The e-mail address of all authors is now reported in the title page

2. Please change the title of the 'Materials and Methods' section to just 'Methods'.
   - A: The title of the “Methods” section has been corrected.

3. Please perform a copy edit of the entire manuscript and correct any spelling and grammar errors that you find.
   - A: The manuscript has been revised by a editing service
4. Please add a conclusions section after the discussion which should state clearly the main conclusions and provide an explanation of the importance and relevance of the study reported.

-A: A conclusion section has been added after the Discussion.

5. Please make the following revisions to the authors' contributions section:

   a. We were not sure who author TRM is, please confirm or amend the initials.

   b. We also did not see a mention of author Anna Rita Saponara, please ensure that all the authors are referred to.

   c. Please be aware that we follow ICMJE guidelines for authorship which state that all authors must fulfil all four of the following criteria:

-A: The authors contribution section has been revised and amended. All authors fulfil all the four mentioned criteria

Reviewer 1

Zen-Kong Dai : Firstly, I would like thank you for giving me the important chance to read the interesting paper which was written well. Accordingly, transthoracic ultrasound is recognized as a complementary and adjunctive tool in diagnosing community acquired pneumonia(CAP), which is based on the finding of chest X-ray film. In this article, the authors just emphasize the fact that transthoracic echography can be used to make the final diagnosis and monitor the course during the management of patients with CAP, with the combination of Chest X-ray film, especially in the consolidation (hypoechogenic lesion) located in the subpleural areas. Although the conclusion is commonly accepted by the experts in the pulmonology field, but it is not novel finding.
Dear doctor Zen-Kong Dai,

thank you for your criticism.


These findings stress the possible relevant role of TUS as complementary diagnostic tool for CAP, easily available also in Internal Medicine Units. However, it should also be stressed as our data, although not novel, provide solid arguments to hamper excessively optimistic beliefs on TUS, recently emerged from literature.

Reviewer 2

Dear dr Di Marco,

thank you for your criticism.

Major comments:

- The paper is full of typo mistakes (mainly spaces between the words, points, commas, etc); please, correct them. A native English speaker should revise the text.

- A: The text has been revised for typing mistakes and the manuscript has been revised by an editing service.

- The GOLD standard for CAP diagnosis is so far CT. This aspect should be taken into consideration.
- A: The role of CT as gold reference method in CAP diagnosis has been focalized in the background section (see page 3, line 10-13).

- Moreover, Authors stated that confirmation of recovery was by clinical assessment, TUS and CXR, performed during stay and/or within 30 days from the initial observation, including controls on an outpatient basis. It’s difficult to assess the role of TUS for recovery if the same tool has been used to evaluate the outcome.

A: Actually, the statement concerning the use of TUS to assess recovery is not correct. The point has been now better exposed in the Discussion (see page 9, line 15-19).

- TUS was performed, as reported in figure 1, by a well-trained operator who was aware about the diagnosis of CAP. This is a major bias if Authors are interested in the accuracy of this technique (the operator should be blind about the result of CXR in a patient with a clinical suspicion of CAP).

- A: We agree with your request. As now better specified in the methods section (page 5, line 10-11) and in figure 1, the TUS operator performing all exams was blinded to the diagnosis.

- Abstract: in the “Conclusions” section I would not start with “Although TUS could substitute CXR in the diagnosis of most pneumonia cases……” since the primary conclusion of the present study does not seem to indicate this. Also the comment relative to “the length of stay” is not appropriate, since this outcome has not been evaluated in this study and this comment is totally arbitrary.

- A: In the abstract, the conclusion section have been modified according to your observation (see page 2, line 17).

- I would limit the description of inclusion and exclusion criteria in methods section, moving in result section the features of enrolled patients. In the other hand, the sequence of modifications of TUS (currently in Result section) should be moved in methods section.

- A: As suggested, the Methods and the results sections have been modified
- I suggest the use of sub-chapter in methods and results sections to make easier the reading of the paper (in methods is present a single chapter with “patients” including indeed all the methods).

- A: Subchapter headings have been added in the Methods and Results sections.

- Inter-reader agreement was excellent; however, the rules applied (how many MD performed TUS and the level of skills) to evaluate this aspect need to be clarified in methods section.

- A: Details about the assessment of inter-reader agreement has been added in the section methods (see page 6, line 9-12)

- Figure 2 is redundant since the technique has been already standardized.

- A: Figure 2 has been deleted.