Reviewer's report

Title: Validation study of a diagnostic aid to rule out pneumonia in adults with cough and fever

Version: 3 Date: 26 October 2012

Reviewer: Carl Llor

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Major compulsory revisions:

The definition of the health problem is not clearly defined. You recruited patients with cough but not as the main symptom. We cannot therefore affirm that the patients included in your sample were diagnosed with lower respiratory tract infections, since other infections such as common cold and sore throat might have been included in your study. You report that the median duration of cough in your sample was seven days. This finding could also explain that infections other than lower respiratory tract infections were also taken into account. Please discuss this more in depth.

What does ‘subjective or measured increased body temperature’ mean? Please define. In addition, I would like you to discuss whether patients were instructed to measure the temperature daily or not in more detail.

Patients were supposed to be contacted by phone only once, fourteen days after having been included but I am not sure about this. Could you also better state the follow-up of patients in this study?

You excluded patients with known chronic lung diseases except for chronic bronchitis. Were patients with spirometrically-based COPD included or excluded?

You should also explain more clearly how many chest X-rays were performed in this sample. Pneumonia can only be ruled out when the radiographic study is negative. The conclusion of this study may be misleading. Even though you discuss the fact that chest x-ray was not systematically ordered as the main limitation of this study, you should explain how many plain x-rays were performed.

Neither is the selection of the sample clear. Could you provide more information in this paper?

I highly recommend the inclusion of a table with the main characteristics of the patients included in the study.

Minor essential revisions:

You say that antibiotics are only recommended for patients with moderate-severe chronic bronchitis. However, a recent paper reports the efficacy of antibiotic
therapy also for exacerbations of mild to moderate COPD (Am J Respir Crit Care Med). Please change.

How was dyspnoea defined? Did you use a dyspnoea score or was it measured only by asking the patient about breathlessness?

I highly encourage the use of numbers—not only percentages—when you describe the main results (last paragraph of page 6).

**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.