Reviewer's report

Title: Validation of the new COPD Assessment Test (CAT) translated into Thai in patients with Chronic Obstructive Pulmonary Disease (COPD)

Version: 3 Date: 25 April 2014

Reviewer: Benoit Arnould

Reviewer's report:

Major:

1) it seems my first major concern was not clearly explained. And your answer doesn’t address it. What I meant is that use of scales for clinical routine, i.e. at individual level, needs specific properties and performances to be assessed. A good scale for research, with high reliability, validity and responsiveness, is not always a good scale for use at individual level. Particularly, Cronbach alpha level 0,85 is high for a use of the scale in group comparisons (as you say, > 0,70 is ok for aggregate data), but is low for use of scale to estimate individual levels. The statement "This questionnaire can be used as an easy and reliable tool to assess health status in COPD patients in studies as well as in clinical practice" is supported by data as regards "use in studies", but it is not supported by data as regards "use in clinical practice". The discussion about this point is well conducted, however, one can only encourage the use of the tool in routine, not state that it has shown to be suitable for that purpose. I would like to see a statement expressing the need of further studies to demonstrate its ability to reliably measure intra-individual change, detect interpretable differences to norms, trigger or support useful discussion between patient and doctor, and generally contribute to better and more efficient care... A sentence such as "Not only CAT could be used to reflect the health status but also will provide clinicians with the assessment for long-term follow-up of individual patients" is a expressing a wish, not a fact nor a scientific truth. Such sentence needs to be altered a more rigorous statement.

2) in "Methods Health Status questionnaires" section:
- rather than the name of the company preforming the translations, and in addition to the reference to ISPOR guideline, I would like to see a brief description of steps (forward - how many-?, backward?, tests with patients? Contacts with authors?)
- complete description of CAT content is needed, in place of "The Cat has 8 items and encompassed questions like..."

3) In "Results Health status questionnaire Gold stage" section
- We understand that only the comparison of GOLD II and GOLD IV gave significant result. We need to see the global test value (as you show for SGRQ in table 1)
- Could we see results according to exacerbations?

4) In discussion: we need small differences across GOLD to be discussed in more details with some comparison to other published results. Also, correlation to MRC and SGRQ are not very high. Was it the same with other populations?

Minor:

1) May I suggest using HRQoL as an abbreviation for Health-related quality of life, rather than writing health-related QoL.

2) Background: the last sentence of the first paragraph is not absolutely clear. Could it be rephrased?

3) Study assessments and procedures: last sentences has an "and" after call to ref [11], which is probably non intentional.