Reviewer's report

Title: Functional capacity, physical activity and muscle strength assessment of individuals with non-small cell lung cancer: A systematic review of instruments and their measurement properties.

Version: 1 Date: 14 November 2012

Reviewer: Darren Brenner

Reviewer's report:

The authors present a review focused on three commonly assessed outcomes (functional capacity, physical activity and muscle strength) used in NSCLC literature.

Overall impression: The manuscript is well written with few grammatical and syntax errors.

Major Compulsory Revisions

The review of the outcome measures (OM) by the authors presents a substantial effort to “identify, evaluate, synthesis and compare” the measurement properties in participants with NSCLC”. As presented the manuscript succeeds to “identify and evaluate” the literature to date with a clear set of search strategies presented. On the aims of synthesizing and comparing the OMs, however, it is felt that in its current state the manuscript falls short of these goals. Effort is required to improve the manuscript in these aspects in order to improve the usefulness of the review in the literature.

Minor Essential Revisions

Methods

Please justify why only the lowest score on the COSMIN was used. Does this affect its applicability to the components under investigation?

Please elaborate on the choice to exclude longitudinal studies providing indirect evidence of responsiveness. Elaborate on what the indirect evidence was and also why to exclude these studies considering this seems to be the element most lacking in the evaluations included.

Please also elaborate why if a relevant sub-component of a battery measure included an OM of interest, why it was excluded?

Results

Tables – Please provide reference numbers for manuscripts in Tables if possible. Allows for easier reference.

Tables – suggests in footnotes that sorted by time since publication, however,
that does not seem to be the case provide the amount

The results as currently displayed present much detail concerning the individual studies included which is helpful as supplementary material. What is lacking is a sense of summarization of the findings. If the utility of this review in the literature will be to provide future researchers through “synthesis” with a sense of whether current tools are useful and based on how much data, this message is not clear from the data as presented. Would it be possible to summarize into one table the quantitative outcomes across the studies with a measure of the performance of the instruments across studies. I.e:

N studies N cases measures of performance (range etc.)
Rel. Val. Respons.
FC
PA
MS

Discussion
A large proportion of the information contained in the Discussion section should be included in the results section.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

No