Reviewer’s report

Title: Exercise training for asbestos-related and other dust-related respiratory diseases: a randomised controlled trial

Version: 2 Date: 6 August 2014

Reviewer: Fatima Rodrigues

Reviewer’s report:

Marita Dale and co-authors investigated in a randomized controlled trial, the role of exercise training in a male population with asbestos-related and other dust-related respiratory diseases.

The authors evidenced short and long-term benefits from a 8 weeks aerobic exercise training program, with significant clinical and statistical improvement in functional exercise capacity and health-related quality of life immediately after completion the exercise program and maintaining the effects 26 weeks following intervention.

This manuscript contains very interesting material, and focuses important and original data as it is the first randomized controlled trial to examine the effects of exercise training on exercise capacity and health-related quality of life in people with dust-related pleural and interstitial respiratory diseases.

The question posed by the authors is well defined; the methods are appropriate and well described.

Nevertheless, I have some comments to this paper.

Major Compulsory Revisions:

1. All participants were male. Therefore this should be pointed in the text, including title, abstract, materials, discussion and conclusions.

2. There was heterogeneity in the diagnosis of study participants, and although the different diagnosis was well distributed between exercise and control groups, it still limits the generalization of the results. There’s a paucity of literature data on exercise training in dust-related ILD and this study added eleven patient’s data (7 versus 4). There’s no data on exercise training in people with dust-related pleural disease, and this study evidenced the benefits of exercise training in 24 patients (11 versus 13). Therefore other studies are welcome to add more data on these subjects.

3. As authors pointed, the majority of participants (69%) had pleural and not parenchymal lung disease. Also, patients on long-term oxygen therapy were excluded from the study. Therefore it is expectable that the results would be different from Holland’s study in apparently more severe patients with ILD, predominantly IPF. This should also be addressed in the Discussion (see line
4. In the line 379 of Discussion, authors state that the “...statistically significant improvement in CRQ total score and domains of dyspnoea and emotional function, did not reach the MID established for COPD”. This should be more detailed as the MID usually accepted for CRQ in COPD is 0.5 and in this study all these scores were greater than 0.5.

5. In Key-words: I suggest authors to include also “Pulmonary rehabilitation” and replace “Quality of life” with “Health-related quality of life”.

6. In the line 118-119: in the sentence: “Higher levels of daily physical activity have health benefits for people with chronic obstructive pulmonary disease (COPD), including greater exercise capacity and a higher single breath diffusing capacity for carbon monoxide (DLCO)” authors should include a reference about physical activity improving single breath diffusing capacity for carbon monoxide.

Minor Essential Revisions:

7. In the line 62 of Abstract, there should be a space between “2.1 to” and “10.7”

8. In the line 369 of Discussion, “…the MID ranging from of 100-200 seconds…” the word “of” should be deleted.

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

I declare that I have no competing interests