Reviewer’s report

Title: Effects of high intensity interval training on exercise capacity in people with chronic pulmonary conditions: a narrative review

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Reviewer: Fabio Pitta

Reviewer's report:

The article is interesting, well written, timely and has a high scientific level. A few points deserve consideration:

Major comments:

Introduction is somewhat superficial. The authors do not introduce properly the information coming from previous reviews already done in this topic. Many studies included here have been meta-analyzed before. The authors might provide in the introduction (and if possible, also in the abstract) a stronger rationale for the study.

Still in the introduction, the authors start the article referring to "interval training" and suddenly change to the term "HIIT" without describing if they refer to the same thing. The term HIIT appears for the first time only close to the end of the introduction (middle of page 5), without any previous indication in the text as to what it refers to. In this sense, it is somewhat hard to know why the authors refer to HIIT in the title, abstract and rest of the introduction, if they start the introduction of the modality calling it simply "interval training". However, despite starting to name the modality as HIIT, in the last sentence of the introduction the authors again mention "interval training". So, it is not clear why they bounce between the terms, and there is risk that the average reader may feel confused whether the two terms refer to the same. Please standardize.

Although the article mentions the previous reviews on COPD, it does not refer to the review by Elkins & Dwyer (Br J Sports Med 2011).

This reviewer believes that is very important to describe at least the basic information of the search strategies in the methods section of the main article, which was not the case (all information on search strategies are on the online supplement).

Could the authors clarify in the article why the only outcomes chosen for the review were Wmax and VO2peak?

In general, the results deal very superficially with trying to provide mechanistic/physiological explanations as to why HIIT leads to similar effects in comparison to continuous training. Perhaps this can be somewhat improved.
Minor comments:

By reading the abstract, it seems that the paucity of studies in diseases other than COPD indicates that a literature review on them seems a little precipitated; however, I assume that we would not know that unless the review was done. Perhaps the authors could try to rethink the abstract to make it more appealing, as mentioned in my first major comment.

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