Reviewer’s report

Title: Oxygen kinetics during 6-minute walk tests in patients with cardiovascular and pulmonary disease.

Version: 1 Date: 14 April 2014

Reviewer: Alessandro Mezzani

Reviewer’s report:

Minor Essential Revisions

Abstract

1) Line 7. ‘... , to what extent VO2 kinetics at the onset of exercise...’ should be changed to ‘... , to what extent VO2 kinetics at the onset of 6MWT...’.

2) Line 11. The acronym ‘MOB’ is never used in the Abstract, so it can be omitted.

3) Line 18. The acronym ‘PAH’ has not been previously explained - please explain.

4) Line 19. The acronym ‘CHF’ has not been previously explained - please explain.

Introduction

1) Page 3, Line 22. Readers may be unaccustomed to the terms 'O2 deficit' and 'VO2-amplitude'. MRT should better be defined from a mathematical standpoint, e.g. 'The time needed by the VO2 on-response to reach 63% of its final steadystate amplitude'.

2) Page 3, Line 27. The concept of 'the difference in O2 uptake at rest and steady-state' is not clear - please expand and rephrase.

Methods

1) Page 5, Line 5. ‘VO2peak >84% predicted' could be defined better as 'VO2peak equal to predicted maximum'.

Results

1) Page 7, Line 9. '6MWT' should be changed to '6MWD'.

2) Page 7, Line 12. 'Pulmonary aterial hypertension' should be changed to 'PAH'.

3) Page 7, Line 13. 'Chronic heart failue' should be changed to 'CHF'.

4) Page 7, Line 26. '6MWT' should be changed to '6MWD'.
Discussion

1) Page 8, Line 37. The acronym 'SV' can be omitted here and throughout the subsequent text.

2) Page 9, Line 1. The acronym 'CO' can be omitted here and throughout the subsequent text.

3) Page 9, Line 9. '6-minute walking distance' should be changed to '6MWD'.

4) Page 9, Line 23. The acronym 'EDV' can be omitted here and throughout the subsequent text.

5) Page 9, Lines 28-29. This concept is relevant, and deserves some more room in the Discussion as to possible explaining hypotheses.

Table 1

1) The column COPD has been doubled - please remove one.

Table 2

1) Please remove ps before <0.001

Level of interest: An article of importance in its field

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.