RESPONSE TO REVIEWERS' COMMENTS

1. Authors divided all the patients in two groups of severity according to the median value of peak VO2 (18.0 ml/kg/min), predicted peak VO2 (65.5%), VE/VCO2 slope (32.5) and EF (reduced and mid-ranged EF). Is this a reasonable grouping?

Response: Thank you for your comment. Unfortunately, the small number of patients (49 patients) in our study and their mean moderate or good functional capacity did not allow us to divide patients according to established protocols such as Malhotra's, Guazzi's or based on the Weber functional class because our groups would consist of very few patients (less than 10) and they would not be homogenous (for example the worse group would have 5 patients and the better more than 40). For these reasons, we chose to divide our groups based on our sample's CPET indexes. Moreover, our patients' EF was <50% so we created one group with HFrEF and one with HFmrEF.

2. Authors used three methods for grouping, but only one group was analyzed for demographic and exercise characteristics. Please amend it.

Response: We would like to thank you for your comment. We considered peak VO$_2$ the most important and prognostic index of functional capacity of a CHF patient and for that reason we included it in the main text of the manuscript. However, we added the analysis for demographic and exercise characteristics of the other groups (using the other 3 methods for grouping) in the supplementary material.

3. The values of cellular populations are expressed in median (25th-75th percentiles). And the difference between the two groups is described by using boxplots. The above indicates that this kind of data belongs to non-normal distribution. Please describe it in the article and present the statistical value.

Response: Values of cellular populations are expressed in median (25th-75th percentiles). Also, difference between the two groups are described by boxplots. Indeed, our data regarding cellular populations has no normal distribution. We refer this statement in the methods (3rd and 4th line of statistical analysis paragraph).

RESPONSE TO SCIENCE EDITOR'S COMMENTS

1. Language evaluation: Classification: Grade A. The authors didn't provide the language certificate.

Response: A language certificate has been attached with the other documents.

2. The authors did not provide original pictures. Please provide the original figure documents. Please prepare and arrange the figures using PowerPoint to ensure that all graphs or arrows or text portions can be reprocessed by the editor.

Response: Original figure documents in PowerPoint have been provided.

3. The "Article Highlights" section is missing. Please add the "Article Highlights" section at the end of the main text.

Response: Article Highlights have been added at the end of the main text.