Reviewer’s report

Title: Low triiodothyronine syndrome and selenium deficiency - undervalued players in advanced heart failure? A single center pilot study.

Version: 1 Date: 03 Feb 2019

Reviewer: Dalgisio Lecis

Reviewer's report:

This study deal with low fT3 syndrome and selenium deficiency as possible players in heart failure. In particular it shows that low fT3 syndrome is frequently found in patients with HFrEF and moreover is associated with a poor outcome. You describe largely the phisiopatological basis of low fT3 syndrome in patients with HFrEF. Other previous studies demonstrated the prognostic value of low fT3 in patient with HF. Therefore, what is shown in the article does not represent a novelty in this field, but this is the first one that highlights the strong association between low fT3 levels and low fT3/fT4 ratio with a bad outcome in patient with HFrEF. On the other hand the present study do not prove the correlation between Selenium deficiency and low fT3 levels in this kind of patient. The design of the study is well structured, but it's necessary to express in "Methods" the type of study (prospective cohoty study) designed. Moreover inclusion and exclusion criteria are well explained. The conclusions are adequately supported by the results. The figures are well designed and organized. In conclusion, I approve the article with the required modifications.

Wording mistakes:

Line 69: lack of TH (acronym of?)

Line 243: kotzal et al.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes
Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

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