Reviewer’s report

Title: Use of ivacaftor in late diagnosed Cystic Fibrosis monozygotic twins heterozygous for F508del and R117H-7T – a case report

Version: 0 Date: 22 Nov 2018

Reviewer: Fernando Marson

Reviewer’s report:

The authors performed a great study about the use of Ivacaftor to deal with patients with CF.

However, before to be published the authors should include some corrections in the text to provide a better overview about the data and its interpretation.

Major comments:

(i) Title, the authors should use F508del or p.Phe508del and p.Arg117His;

(ii) In the text the complete information about the mutations should be provided;

(iii) The therapy protocol should be included in details;

(iv) The life history can be the "secret" to have a difference between the twins. Can the authors include an explanation about the daily life activities from the two women;

(v) The improvement in the lung function from patient 2 is normal and expected. However, in my opinion, the patient 1 showed a no improvement because there is a high structural damage in the lung structure. In this way, the absence of improvement is not a marker to consider as a failed therapy and/or a characteristic linked to modifier genes or CFTR mutations.

Minor comments:

(i) The CFTR gene has 2000 variants identified until now, from these variants ~300/400 are pathogenic variants;

(ii) There is seven CFTR classes;

(iii) CFTR gene should be written in italic;

(iv) The authors should provide the names of the follow abbreviations in the text: CBAVD, CT, RCT and FDA. Also, FEV1 should be described in the first time;
(v) The name of bacteria should be written in italic. Also, the authors should use the abbreviation P. aeruginosa;

(vi) The authors used the cystic fibrosis and CF at the same time.

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

No

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

Unable to assess

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

No

**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.

Not relevant to this manuscript

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

Acceptable

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None

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