Reviewer’s report

Title: Hepcidin gene polymorphisms and iron overload in β-thalassemia major patients refractory to iron chelating therapy

Version: 1 Date: 13 Dec 2019

Reviewer: Marina Kleanthous

Reviewer's report:

1. Table 2. In this table the authors compare 96 AA/AG patients with 6 GG patients, which is a very weak comparison. I suggest dividing the patients into three groups based on the c.-582A>G genotype (AA: 55 patients, AG: 41 patients and GG: 6 patients) and redo the statistical analysis. If the G allele is a modifier, then heterozygotes will possibly show statistically significant differences from the other two groups. Considering the fact that the number of patients in the heterozygotes group is high, the suggested analysis will possibly further support the role of the G allele as an iron overload modifier. 2. Remove figures 1 and 2 and the related text in the manuscript. The results presented in the figures are confusing and not described in the Results and Discussion sections. 3. Line 51: replace 'iron hemostasis' with 'iron homeostasis'

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.

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.

I recommend additional statistical review

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