Reviewer’s report

Title: Design of the Growth hormone deficiency and Efficacy of Treatment (GET) score and non-interventional proof of concept study

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Reviewer: Pinar Kadıoğlu

Reviewer's report:

This research article presents a prospective ,observational multicenter study on Design of the Growth hormone(GH) deficiency and Efficacy of Treatment (GET) Score.

The aim of the study is to design a score to summarize the feature of growth hormone deficiency (GHD) and to evaluate its ability to measure the effect of GH substitution in adults with GHD in an integrative way.

Of 106 patients eligible for analysis, 22 were untreated GHD controls and 84 received GH therapy.

Follow-up times were 706±258 days in females and 653±242 days in males.

The GET score differed between the untreated control and treated groups with a least squares mean difference of +10.01±4.01 (p=0.0145).

It is important to evaluate all manifestations which occur with GH deficiency in research with GET score.

But there are some minor and major points that can be revised in this study;

Major points:

1- There is currently no agreed upon duration of therapy for GH deficient adults. In Figure 1 and In table 2; GET scores for treated and not-treated groups at every visits were given. Maximum increase at GET score was seen in the third visit (after 1,5 year treatment). This result is important and should be explained in article.

2- Exercise capacity, muscle strength or body muscle mass with Tanita Scale can be added in parameters for estimating GET score.

3- Treated and untreated groups of other co-morbidities and concomitant medicines which may have affected the results was not unmentioned in article.
Minor points:

1- In this study; HRQoL (40%), disease-related days off work (10%), bone mineral density (20%), waist circumference (10%), low-density lipoprotein cholesterol (10%) and body fat mass (10%) were included for estimating the growth hormone deficiency and efficacy of treatment (GET) score. And all parameters results were given for treated and not-treated groups. But statistical significance between two groups were not specified for all this parameters.

2- A total 106 patients were included in the study, but GET score could only be calculated for 75 patients. In abstract this should be indicated.

3- Did any side effects occurred in patients with GH treatment?

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?
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I am able to assess the statistics

Quality of written English
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Acceptable
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