Reviewer's report

Title: Growth from birth to two years in a cohort of children diagnosed with CF by newborn screening

Version: 1 Date: 10 Jun 2019

Reviewer: Zhumin Zhang

Reviewer's report:

As pointed out in the responses, "the z scores varied significantly over time". Growth in children with CF tends to fluctuate over time due to the disease. To make things even more complicated, height/length is prone to measurement errors. Nevertheless, using the annualized data (the average of quarterly-measured values) to represent growth status at certain ages is problematic, especially during infancy. For example, the following three infants have the same annualized values at age 12 months. But growth trajectories during the first year are completely different among these infants, and growth status at age 12 months are also very different. Therefore, using the annualized value to represent growth status at certain ages could lead to not only the loss of the critical information, but also the false/misleading information.

<table>
<thead>
<tr>
<th>Subject</th>
<th>age0</th>
<th>age3</th>
<th>age6</th>
<th>age12</th>
<th>mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>b</td>
<td>-1</td>
<td>-0.5</td>
<td>0.5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>c</td>
<td>1</td>
<td>0.5</td>
<td>-0.5</td>
<td>-1</td>
<td>0</td>
</tr>
</tbody>
</table>

2. Figure 1: Please explain what growth outcomes z-score=-1, z-score=0, z-score=1, and z-score=2 stand for. Does z-score=-1 indicate that z-score is exactly equal to -1? What is the clinical relevance of these cutoff values?

3. Given the important clinical utility of both weight-for-length and BMI, these two growth indexes need to be evaluated in addition to weight and length.

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.

No

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 am able to assess the statistics

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

Acceptable

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