Reviewer's report

Title: Early gut microbiota signature of aGvHD in children given allogeneic hematopoietic cell transplantation for hematological disorders

Version: 0 Date: 12 Feb 2019

Reviewer: Marcel Van Den Brink

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Minor suggestions:

Line 37:
- "Change in GM phylogenetic structure were reconstructed by 16S rRNA gene illumina sequencing"

This phrase is imprecise. 16S sequencing does not reconstruct phylogenetic structure. It identifies 16S sequences (V3-V4 regions in this cases). The phylogenetic structure did not seem to be reconstructed, but assigned according to greengenes database.

Line 163 and 201: The random forest description is unprecise. In the methods (line ~163), the PI state that random forest uses the genus level to discriminate categories. In the results, it seems that the PI used age to discriminate genus level.

Figure 3: The panels have been improved, but panels C-E could still be more informative in spite of the caption. The author should avoid name abbreviations could be avoided and if the panels itself could inform that log2(fold change) refers to engraftment vs pre-transplant samples.
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
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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