Dear colleagues,

I am pleased to submit the revised version of the manuscript entitled "Haploidentical hematopoietic stem cell transplantation as promising therapy in the improved survival of pediatric patients with leukemias and myelodysplasias: A systematic review for consideration for publication in the *World Journal of Meta-Analysis*. Please allow me to express my sincere gratitude for your valuable and pertinent suggestions. We resolved all issues in the manuscript based on the peer review report and here we make a point-by-point response to each of the issues raised in the peer review report.

1. Reviewer #1 - Specific Comments to Authors: The Haploidentical hematopoietic stem cell transplantation (Haplo-HSCT) is a promising method to cure leukemias and myelodysplasias in children by their family members, but many problem in this treatment limit its application. It is very necessary to estimate efference and damage of Haplo-HSCT. This study aims to clarify the current research of Haplo-HSCT to date. However, some flaws in study designs have resulted in a low level of confidence in the conclusion. Systematic reviews are considered as a high level of evidence due to its comprehensive and structured approach to identifying selecting, and synthesizing all relevant studies, which were not shown in this manuscript. So I am sorry to suggest to reject it. 1. The search strategy did not guarantee the accuracy and comprehensiveness of the author's search results. Authors should search more results in other data bases, such as Embase, Web of Science and Cochrane Library. 2. The study didn't estimate the risk of bias in study, which make conclusion lack of credibility. Author should survey each study design carefully and report more potential sources of bias in studies. 3. Different ethnicities have variations in the incidence and major types of leukemia and myelodysplastic syndromes. The author included studies from different countries without further specification.

Reply: a new search was carried out in the Embase and SciELO databases, with the listed eligibility criteria. The results underwent a rigorous analysis, by a pair of reviewers, independently. The articles were included in the review analysis and all their data were extracted. In addition, the Cochrane Risk Of Bias in Non-Randomized Studies of Interventions (ROBINS-I) tool was used to assess possible biases of the 18 selected articles. The tool domains were explained in the text. Regarding ethnicity, the 18 articles were analyzed again, however, this topic was not explored by the authors, and, therefore, constitutes a limitation of this review.

Dear reviewer #1,

Thank you for the great evaluation of our manuscript and your valuable and helpful comments.

2. Reviewer #2 - Specific Comments to Authors: The authors have nicely discussed an interesting topic regarding the haploidentical HSCT in pediatrics which can be very valuable for many medical centers. The manuscript is well-written and well-organized. Some extra English revision and editing revision for the abbreviations is needed. However, the paper included only 16 articles which is very low to draw a strong conclusion. Additionally, I missed the final conclusion as I was hoping that the authors would suggest the best model/conditions for the haplo HSCT (age, diagnosis, clinical conditions, conditioning regimen, etc.) Below some details comments/suggestions in order to improve the manuscript: 1. Abstract: a. Very long abstract that make it boring

and confusing to read. b. The authors should be consistent with the abbreviations (either to include or exclude the full name according to the journal guidelines). c. The discussion section should be totally removed. d. Few sentences about the conditioning regimen should be added. 2. Results a. It is sad that the authors didn't have access to the paid articles that should have enriched the manuscript. It will be great if they can reach them via their institutional account or even with the help of their friends. They may change the study conclusion as the 16 articles may not be enough for accurate conclusion. b. The abbreviation "PSCB" is, to the best of my knowledge, is not correct and should be replaced by "PBSC" in all the manuscript. c. It is not clear if all patients have received post-transplantation cyclophosphamide or not? d. Since the patients received different conditioning regimens, it will be great if the authors can suggest the best one for Haplo HSCT. e. One major missing information is the liver status before and after transplantation. f. Also, the SOS incidence is missing in the patients' outcome. g. In the last paragraph (Ref 23), the authors did not mention what chemotherapy regimen was given to the patients. 3. Conclusion, as mentioned previously, it is missing the best model/conditions for Haplo HSCT.

Reply: suggestions were received and followed. Thus, the abstract was edited, checking all sections, abbreviations and adding the necessary information about the conditioning regimen. Unfortunately, paid articles were not included for review. The conditioning of the patients was detailed in text and in the tables, presenting the contrasting and effective points of each regimen in the analysis of this review. All articles were analyzed for information about the liver, and these data were included in the text. However, this was also a limited analysis, as few authors included this information in the post-transplant complications section. All tables have been checked and edited. Finally, the indications and limitations of Haplo-HSCT were added in the conclusion.

Dear reviewer #2,

Thank you for your pertinent suggestions. The comments you made on our manuscript were very important to the improvement of its quality and we are grateful for your crucial help.

Sincerely,

Fabricio Freire de Melo

Fabrício Freire de Melo, PhD

Professor,

Federal University of Bahia, UFBA