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Name of journal: *World Journal of Orthopedics (WJO)*

Manuscript ID: 79981

Title: **On the quest for a taper-wedge stem suitable for anterior approach total hip arthroplasty: adequate biomechanical reconstruction parameters and excellent clinical outcome at mid-term follow-up**

Dear Editor of World Journal of Orthopedics,

On behalf of the other authors and myself, I would like to extend my gratitude for the efforts and time spent reviewing our submission. Before proceeding we would like to point out that the comments of Reviewer #2 are not related to our submission and has probably been linked to our paper as an error, while Reviewer #1 makes excellent points and offers valuable suggestions to improve the manuscript. We have tried to address all issues raised in the review of our paper. **Please find the responses in bold font under each of the comments made by the reviewer below, which can also be found in the revised manuscript:**

**Reviewer #1:**

*1) This is a retrospective study focusing on Anterior approach for total hip arthroplasty. Overall, this is repeating research which focuses on the complications and compares the results with previous studies.*

**Many thanks for the thorough review of our paper. As rightfully mentioned, this topic is extensively reported in literature currently available on PubMed. The aim of our invited manuscript was to report our experience in anterior total hip arthroplasty with special interest on potential complications related to the stem design and the surgical approach. We hope that our modifications can address all the important issues raised by the Reviewer.**

*2) First, please make correlation analysis to figure out potential risk factors for the poor outcome, based on Table 1.*

**A multivariate regression analysis has been performed correlating the outcome scores (HHS and total HOOS) and the variables of Table 1. With regards to HHS, male gender was a significant positive factor. Age, ASA and CCI were significantly inversely correlated with the score. Age and ASA were also significantly inversely correlated with final HOOS total score. A paragraph reporting the results has been added in the Results section.**

*3) Second, this is a study with long time period. Are there more than one senior surgeons conducting the procedures?*

**The Reviewer makes a good point. Surgeries were conducted by a senior surgeon and 2 surgeons during a learning curve for anterior hip arthroplasty. There was no significant difference in complications or implant positioning amongst the surgeons. Relevant information regarding this matter has been added in the Methods, Results and Discussion section.**

**Reviewer #2:**

*Specific Comments to Authors: Major comments: 1) In these two UCB-MNCs-related clinical trial study (Morteza, et al. 2022; Limin, et al. 2019), they tested efficacy and safety of umbilical cord mesenchymal stem cell therapy as well and efficacy and safety were assessed at least 12 months. On the other review article that published by Jaydeep (Jaydeep, et al, 2022) pointed out the follow-up should be extended to more than 2 years of this treatment in future study. Based on these previous studies, therefore, the follow-up in this clinical trial was less than one year and it might not enough*

*period of time to demonstrate the therapy is viable and safe. Please clarify it. 2) Although there were no control group in this study, authors should compare the efficacy of UCB-MSCs with other forms of treatment for knee OA at least. Otherwise, it is difficult to identify the efficacy. Please clarify it. 3) In discussion section, authors talked about the issue of UCB-MSCs injections interval of one month and allogeneic cells cannot survive in the host joint for a long time, and allogeneic bone marrow MSCs can survive for up to four weeks after intra-articular injection. However, UCB-MSCs had been reported that have high proliferation, did authors checked UCB-MSCs viability and effectiveness between two injection intervals, especially the injection numbers of cell were higher? Minor comments 1) There were no references cited on the paragraph "UCB-MNCs were directly isolated from umbilical cord blood with low immunogenicity, non-invasive acquisition, and amplification without in vitro culture." of page 3. Please add the references. 2) The last paragraph in introduction, "in particular, it has not been reported in the treatment of KOA. The purpose of this study was to investigate the efficacy and safety of human UCB-MNCs in the treatment of KOA". Please clarify the latest information of the researches.*

**The comments provided by Reviewer 2 are not pertinent to our manuscript. These comments have probably been loaded on our profile as a mistake.**

**The valuable comments and assistance with our paper is greatly appreciated. We look forward to your final decision regarding our modifications, with hopes that all concerns have been addressed in an appropriate manner.**

**Kind regards,**

**Carlo Trevisan, Antonino Salvatore Lombardo, Gianluca Gallinari, Marco Zeppieri, and Raymond Klumpp**