

Reviewer: 1

Comments to the Author

**Specific Comments to Authors:** The manuscript is extremely interesting and useful to improve GVHD outcome. I don't see any major fault, but I can suggest to ameliorate clarity of the abstract specifying therein the contextual clinical settings and the cellular sources utilized, for the immediate understanding of researchers not directly involved in clinical activity.

We added some clinical settings to abstract.

**(1) Science Editor:** 1 Scientific quality: The manuscript describes a basic study of the immunophenotypic characteristics of multipotent mesenchymal stromal cells that affect the efficacy of their use in the prevention of acute graft versus host disease. The topic is within the scope of the WJSC. (1) Classification: Grade C; (2) Summary of the Peer-Review Report: The manuscript is extremely interesting and useful to improve GVHD outcome. However, the questions raised by the reviewer should be answered; and (3) Format: There are 5 tables and 6 figures. A total of 60 references are cited, including 47 references published in the last 3 years. There are no self-citations. 2 Language evaluation: Classification: Grade B. A language editing certificate issued by AJE was provided. 3 Academic norms and rules: The authors provided the Biostatistics Review Certificate, the signed Conflict-of-Interest Disclosure Form and Copyright License Agreement, the Institutional Review Board Approval Form or Document, and the ARRIVE Guidelines. No academic misconduct was found in the CrossCheck detection and Bing search. 4 Supplementary comments: This is an invited manuscript. The study was supported by 1 grant. The topic has not previously been published in the WJSC. 5 Issues raised: (1) The authors did not provide the /approved grant application form(s). Please upload the approved grant application form(s) or funding agency copy of any approval document(s); (2) The authors did not provide original pictures. Please provide the original figure documents. Please prepare and arrange the figures using PowerPoint to ensure that all graphs or arrows or text portions can be reprocessed by the editor; and (3) The "Article Highlights" section is missing. Please add the "Article Highlights" section at the end of the main text. 6 Re-Review: Required. 7 Recommendation: Conditional acceptance.

(1) The authors did not provide the approved grant application form(s). Please upload the approved grant application form(s) or funding agency copy of any approval document(s);

We upload the approval document, but it is in Russian.

We added the "Article Highlights" section at the end of the main text.

We added original figures using PowerPoint

#### Re-review

We are pleased to inform you that the author has replied to your comment regarding manuscript NO. 56957. The reply is as follows:

The study examined samples of MSCs used for the prevention of GVHD, which were collected over 10 years of research. We realize that there are few ineffective samples, but it is not possible to increase their number. At the same time, we believe that extremely interesting results have been obtained, which may reflect the mechanism of the immunomodulatory action of MSCs and serve as a criterion for selecting the most effective ones. The involvement of histocompatibility antigens in the mechanism of the immunomodulatory action of MSCs has not been previously described and may open a wide area for further research, therefore we consider it necessary to publish our data. The English language was checked by native speaker and the editors, the certificate was attached when submitting the article.