

### **Editorial 3 Peer-review report**

#### **Reviewer #1:**

**Reviewer's Comment:** It is an exciting finding that high glucose is detrimental to MSC function. However, in our research group, mouse-derived primary BMSCs were cultured in high glucose medium. It is well known that glucose is an essential energy source for cell survival. Therefore, it is suggested that the authors could add to clarify how high glucose concentrations would have toxic effects on different types of MSCs. A table can be supplemented to summarize the glucose concentrations that produce damaging effects on different MSCs according to the published literature.

#### **Author's response:**

We thank the worthy reviewer for his interesting comment. We have already made a similar comment on Page#9, the last sentence. We have further elaborated on this comment. Also, a new table (90697-Table 1.docx) summarizing the data has been added per the reviewer's suggestion.

#### **Reviewer #2:**

**Reviewer's Comment:** This article is well written, and after some minor revision could be suitable for publication.

Author's response: We thank the worthy reviewer for his encouraging remarks.

**Reviewer's Comment:** There are some typos, such as "HG-, ""inflammatory state)[4]", "BM-derived MSCs)[7]", and "mTOR/Aky dysregulation."

#### **Author's response:**

The suggested changes have been made.

**Reviewer's Comment:** 2. Are there some differences between "MtMP" and " $\Delta\Psi_m$ "? 3. The ORCID Number provided in the manuscript is not accessible.

#### **Author's response:**

Both are the same terms. My ORCID is (0000-0002-7907-4808)