

Review of: "HIF-1 α overexpression in adipose mesenchymal stem cell-derived exosomes ameliorate hypoxia-induced dysfunction and inflammation in HUVECs"

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Potential competing interests: The author(s) declared that no potential competing interests exist.

The manuscript entitled "HIF-1 α overexpression in adipose mesenchymal stem cell-derived exosomes ameliorate hypoxia-induced dysfunction and inflammation in HUVECs" demonstrates that HIF-1 α -modified ADSCs-derived exosomes could reduce the cell injuries and inflammatory response of HUVECs partly through activating SIRT3 dependent manner. In general, the concept of this study is interesting. However, it is recommended for publication after the authors fully address the following concerns

- 1.The Introduction should be logical,including the status quo,bottlenecks and key factors of the research on this disease,the mechanism of action of this signal pathway and its relationship with this disease.
- 2.The expression of usC-EXOS in line 6 of the first paragraph of Result is wrong.
- 3.In figure 1,the identification of ADSCs lacks multidirectional differentiation test,and the identification of exosomes lacks NTA test.
- 4.The usage and dosage of exosomes in animal experiments are not clear.50ul exosome has only volume but no concentration,so it is impossible to quantify the consistent dosage.In addition,the expression of dosing frequency and time is not clear,so it is suggested that the author express clearly.
5. The discussion section is too simple and only briefly describes the main characteristics of PAH.The treatment principles and treatment methods of PAH should be added to intuitively compare the advantages of the proposed treatment methods.In addition,the authors should provide specific criteria for PAH treatment success,and the comparison of RVSP,RV/BM,RV/LV,MT% and MA% does not result in "improved PAH vascular remodeling and reduced lung injury degree".
- 6.[23,24],[35,36]References are repeated.
- 7.The English in the manuscript needs a polish