

## PEER-REVIEW REPORT

**Name of journal:** World Journal of Clinical Cases

**Manuscript NO:** 65649

**Title:** Effect of intrauterine perfusion of granular leukocyte-colony stimulating factor on the outcome of frozen embryo transfer in patients with thin endometrium: a retrospective study

**Reviewer's code:** 03282635

**Position:** Peer Reviewer

**Academic degree:** MD, PhD

**Professional title:** Senior Researcher

**Reviewer's Country/Territory:** Italy

**Author's Country/Territory:** China

**Manuscript submission date:** 2021-03-12

**Reviewer chosen by:** AI Technique

**Reviewer accepted review:** 2021-07-14 06:39

**Reviewer performed review:** 2021-07-14 08:16

**Review time:** 1 Hour

<b>Scientific quality</b>	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Very good <input checked="" type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
<b>Language quality</b>	<input type="checkbox"/> Grade A: Priority publishing <input checked="" type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
<b>Conclusion</b>	<input type="checkbox"/> Accept (High priority) <input type="checkbox"/> Accept (General priority) <input checked="" type="checkbox"/> Minor revision <input type="checkbox"/> Major revision <input type="checkbox"/> Rejection
<b>Re-review</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Peer-reviewer</b>	Peer-Review: <input checked="" type="checkbox"/> Anonymous <input type="checkbox"/> Onymous

## SPECIFIC COMMENTS TO AUTHORS

This manuscript encompass an interesting research question, and presents some potential value including adequate sample size and statistical methods. The manuscript is globally well-written and scientifically sound. However I have some concerns which need to be addressed before publication. Major evidences on frozen blastocyst transfers should be incorporated in the discussion as they are highly relevant for the scopes of the study: 1. CRL of frozen vs fresh is greater in the first trimester; DOI:<https://doi.org/10.1016/j.fertnstert.2020.11.035> 2. uterine artery PI of frozen vs fresh is lower in the first trimester and across gestation; DOI: 10.1002/uog.21969 3. Ebrionic cryo/thawing does not seem to prevent preterm Birth in IVF pregnancies. doi: 10.1080/14767058.2020.1771690. All evidences cited above (which I strongly reccoment citing and including in the discussion) suggest that IVF pregnancies probably have some elements working against placentation, endometrial receptivity and cardiovascular abnormalities. Moreover, all these issues might imprproved for frozen ET. Therefore this is relevant ofr the scopes of the authors for which they propose a method to further improve endometrium. May the proposed method be more effective in fresh cycles? Add a short mention to this issue as a speculation in the discussion section. Another weak point is that the biological basis to promote the use of G-CSF on the endometrium ins not highlighted enough in the background. Cite come biological evidences supporting the improvement of endometrium or the csopes of the current study on pregnancy outcome improvement. What are the argument aganst (bacterial or viral contamination of the cavity?) what are the arguments in favour (promotion of cell growth and maturation favouring embryo implantation?). Are there differences between cleavage stage embryos and blastocyst as far as the scope of the study are

concerned? Please add this data and subanalysis.