

PEER-REVIEW REPORT

Name of journal: World Journal of Stem Cells

Manuscript NO: 55325

Title: Application of Cattle Placental Stem Cells for Treating Ovarian Follicular Cyst

Reviewer's code: 00225346

Position: Peer Reviewer

Academic degree: MD, PhD

Professional title: Director, Head, Professor

Reviewer's Country/Territory: Italy

Author's Country/Territory: Taiwan

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Reviewer chosen by: Ya-Juan Ma

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Scientific quality	<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 Grade E: Do not publish
Language quality	<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
Conclusion	<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
Re-review	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Peer-reviewer statements	Peer-Review: <input checked="" type="checkbox"/> Anonymous <input type="checkbox"/> Onymous Conflicts-of-Interest: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS

In this study, the Authors aimed at assessing whether cattle placental stem cells (CPSCs) may act as a treatment modality for ovarian follicular cysts (OFC) of cows. For this purpose, they divided the subjects of investigation into a control group, a hormone receiving group (Gonadotropin-releasing hormone, and Prostaglandin), both including two subgroups, handled in the absence or presence of follicular drainage, and a CPSC receiving group, encompassing two subgroups receiving different stem cell concentrations in the presence of follicular drainage. The Authors observed that CPSC treated animals exhibited higher recovery rate, estrus rate and inseminated conception rate. Although some of the favorable outcomes were also observed in the hormone-receiving group, the Authors highlighted that, due to the hormone administration, the hormone secreted in the milk might result harmful to consumers. Therefore, They propose that CPSCs may represent a more suitable approach to afford animal recovery from OFC, providing an effective treatment for reproductive disorders, while avoiding the detrimental effects associated with hormone treatment and the onset of hormone resistance in cattle. The results are convincing, the experiments appear to be carefully planning and executed. The Discussion section is in keeping with the experimental observations. Minor point. The Authors reported that they used 32 cows in their study (page 7 of the manuscript, point 1 of "Bovine placental stem cells therapy on Ovarian follicular cyst" Section). Nevertheless, from Table 1 it appears that they used a total of 19 cows in their study. This point needs to be clarified!