

PEER-REVIEW REPORT

Name of journal: *World Journal of Diabetes*

Manuscript NO: 90483

Title: Epigenetic modifications of placenta in women with gestational diabetes mellitus and their offspring

Provenance and peer review: Unsolicited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 05120663

Position: Peer Reviewer

Academic degree: MD

Professional title: Doctor

Reviewer's Country/Territory: United States

Author's Country/Territory: China

Manuscript submission date: 2023-12-05

Reviewer chosen by: AI Technique

Reviewer accepted review: 2023-12-12 12:24

Reviewer performed review: 2023-12-12 12:41

Review time: 1 Hour

Scientific quality	<input checked="" type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Very good <input type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
Novelty of this manuscript	<input type="checkbox"/> Grade A: Excellent <input checked="" type="checkbox"/> Grade B: Good <input type="checkbox"/> Grade C: Fair <input type="checkbox"/> Grade D: No novelty
Creativity or innovation of this manuscript	<input checked="" type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Good <input type="checkbox"/> Grade C: Fair <input type="checkbox"/> Grade D: No creativity or innovation

Scientific significance of the conclusion in this manuscript	<input checked="" type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Good <input type="checkbox"/> Grade C: Fair <input type="checkbox"/> Grade D: No scientific significance
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

The authors wrote a quite interesting review on the placenta epigenetics and gestational diabetes mellitus. This is generally of high interest. Following comments should be addressed. There are many environmental, dietary, and lifestyle factors that influence hormonal factors and pathogenic mechanisms including epigenetic changes in placenta. The authors should discuss these points; influence of those factors, eg, diet, smoking, alcohol, obesity, sleep, exercise, hormonal factors, etc. on placental biology and clinical outcome. These factors may influence molecular pathology and epigenetic changes in each patient differentially. There are also influences of germline genetic variations on epigenetics. Gene-by-environment interactions should be discussed. In these contexts, research on dietary / lifestyle factors, epigenetics, and personalized molecular biomarkers is needed for clinical outcome research. The authors should discuss molecular pathological epidemiology research that can investigate those factors in relation to epigenetic changes and disease outcomes. Molecular pathological epidemiology research can be a promising direction and should be discussed, eg, in Mod Pathol 2013; Epidemiology 2016; World J Hepatol 2016; Ann Rev Pathol 2019.