PEER-REVIEW REPORT

Name of journal: *World Journal of Psychiatry*

Manuscript NO: 75378

Title: ABCB9 polymorphism (rs61955196) is associated with schizophrenia in Chinese Han population

Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 05575341

Position: Peer Reviewer

Academic degree: MD

Professional title: Research Fellow

Reviewer's Country/Territory: United States

Author's Country/Territory: China

Manuscript submission date: 2022-01-28

Reviewer chosen by: AI Technique

Reviewer accepted review: 2022-02-05 23:25

Reviewer performed review: 2022-02-07 17:59

Review time: 1 Day and 18 Hours

Scientific quality	[ ] Grade A: Excellent [Y] Grade B: Very good [ ] Grade C: Good [ ] Grade D: Fair [ ] Grade E: Do not publish		
Language quality	[ ] Grade A: Priority publishing [Y] Grade B: Minor language polishing [ ] Grade C: A great deal of language polishing [ ] Grade D: Rejection		
Conclusion	[ ] Accept (High priority) [ ] Accept (General priority) [Y] Minor revision [ ] Major revision [ ] Rejection		
Re-review	[Y] Yes [ ] No		

Peer-reviewer statements	Peer-Review: [Y] Anonymous [ ] Onymous
	Conflicts-of-Interest: [ ] Yes [Y] No

SPECIFIC COMMENTS TO AUTHORS

Thank you very much for the opportunity to review this manuscript. I would like to congratulate the authors on working on such an important topic schizophrenia, and prenatal famine exposure as a risk factor to cause changes in DNA methylation.   Title: Yes, the title is suitable for the topic.   Abstract: The abstract is clear, and it does summarize the work authors put in. Keywords: Yes, the Keywords are appropriate. Background: Yes, the authors were able to clearly state their motive for doing the study and what is already known also. Methods: In the methods section I would suggest the authors to mention more clearly about what are the inclusion and exclusion criteria that the authors used to select the study participants. Results/discussion: Are good. I would suggest the authors to work on spelling mistakes.

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Title: ABCB9 polymorphism (rs61955196) is associated with schizophrenia in Chinese Han population

Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 05470508

Position: Peer Reviewer

Academic degree: MA, MD

Professional title: Doctor

Reviewer's Country/Territory: Taiwan

Author's Country/Territory: China

Manuscript submission date: 2022-01-28

Reviewer chosen by: AI Technique

Reviewer accepted review: 2022-02-05 11:33

Reviewer performed review: 2022-02-09 15:08

Review time: 4 Days and 3 Hours

Scientific quality	[ ] Grade A: Excellent [ ] Grade B: Very good [ ] Grade C: Good [Y] Grade D: Fair [ ] Grade E: Do not publish
Language quality	[ ] Grade A: Priority publishing [Y] Grade B: Minor language polishing [ ] Grade C: A great deal of language polishing [ ] Grade D: Rejection
Conclusion	[ ] Accept (High priority) [ ] Accept (General priority) [ ] Minor revision [Y] Major revision [ ] Rejection
Re-review	[ ] Yes [Y] No

Peer-reviewer statements	Peer-Review: [Y] Anonymous [ ] Onymous
	Conflicts-of-Interest: [ ] Yes [Y] No

SPECIFIC COMMENTS TO AUTHORS

The authors explored the relationship between prenatal famine exposure and the risk of schizophrenia regarding the methylation of four specified SNPs, namely rs11917047 in PTPRG, rs2239681 in IGF2, rs3842756 in INSIGF, and rs61955196 in ABCB9. The topic of this study is relevant and of potential interest to the reader. However, some methodological issues mitigated the potential impact of the present study, as detailed below.   Please correct the "2239681" to "rs2239681" in the Abstract if the authors are discussing the SNPs. Also, please go through the article to format the gene nomenclature correctly.   The sample size calculation should be mentioned in the Method section.

How the healthy controls were included? What are the inclusion and exclusion criteria for both groups?   There are thousands of SNPs that are reported to be associated with schizophrenia. How did the authors decide to choose the four SNPs in this study? Or just took the potluck randomly? The rationale of locus selection should be discussed clearly.   As the authors mentioned in the limitation, "other possible confounding factors, such as medication use in the sample, any alcohol and drug use, evidence of folic acid intake in the form of prescription or over the counter" are not considered. Also, the duration of illness, severity of psychopathology, and other illness-related parameters are not mentioned. All these confounding factors are strongly contributed to the results of this study and failure to control them will lead to misinterpretation of current findings.

What is the significance of this study? As already known, the ABCB9 polymorphism is associated with many disorders, including schizophrenia. The novelty of this study is the role of prenatal famine exposure in schizophrenia, postulating the ABCB9 gene could be a marker or a modulator for the later psychosis. However, the negative finding was

found in this study. The novelty of this study is questionable.