Biomolecules and Biomedicine
ISSN: 2831-0896 (Print) | ISSN: 2831-090X (Online)
Journal Impact Factor® (2024): 2.2
CiteScore® (2024): 5.2
www.biomolbiomed.com | blog.bjbms.org

SUPPLEMENTAL DATA

Association of *PPARγ2* Pro12Ala polymorphism with gestational diabetes mellitus risk: A systematic review and meta-analysis

Yuanting Xu[1#], Yi Du[1#], Tengfei Shan[1], Qingwen Xie[1], Hongli Zhu[2*]

[1]Department of Obstetrics and Gynecology, Hangzhou Linping District First People's Hospital, Hangzhou, China;

[2]Department of Obstetrics and Gynecology, Hangzhou First People's Hospital, Hangzhou, China.

*Correspondence to Hongli Zhu: zhuhlhfph@ph-edu.cn.

[#]Equally contributed to this work: Yuanting Xu and Yi Du.

Full article is available at the following link: Association of PPARγ2 Pro12Ala polymorphism with gestational diabetes mellitus risk: A systematic review and meta-analysis

Table S1. PRISMA 2020 checklist

Section/Topic	Checklist item	Reported (Yes/No/Page)
TITLE	1. Identify the report as a systematic review.	Yes (p.1)
ABSTRACT	2. See the PRISMA 2020 for Abstracts checklist.	Yes (p.1-2)
INTRODUCTION	3. Rationale: Describe the rationale for the review in the context of existing knowledge.	Yes (p.3–4)
INTRODUCTION	4. Objectives: Provide an explicit statement of the objective(s) or question(s) the review addresses.	Yes (p.4)
METHODS	5. Eligibility criteria: Specify inclusion and exclusion criteria for the review and how studies were grouped for the syntheses.	Yes (p.4-5)
METHODS	6. Information sources: Specify all databases, registers, websites, organisations, reference lists and other sources searched or consulted to identify studies. Specify the date when each source was last searched or consulted.	Yes (p.5)
METHODS	7. Search strategy: Present the full search strategies for all databases, registers	Yes (p.5)

	and websites, including any filters and limits used.	
METHODS	8. Selection process: Specify the methods used to decide whether a study met the inclusion criteria of the review.	Yes (p.5-6)
METHODS	9. Data collection process: Specify the methods used to collect data from reports.	Yes (p.6)
METHODS	10a. Data items: List and define all outcomes for which data were sought.	Yes (p.6)
METHODS	10b. Data items: List and define all other variables for which data were sought.	Yes (p.6)
METHODS	11. Study risk of bias assessment: Specify the methods used to assess risk of bias in the included studies.	Yes (p.6)
METHODS	12. Effect measures: Specify for each outcome the effect measure(s) (e.g. risk ratio, mean difference) used in the synthesis or presentation of results.	Yes (p.6)
METHODS	13a–f. Synthesis methods: Describe synthesis/meta-analysis methods, including heterogeneity,	Yes (p.6)

	subgroup and sensitivity analyses.	
METHODS	14. Reporting bias assessment: Describe any methods used to assess risk of bias due to missing results in a synthesis (arising from reporting biases).	Yes (p.6)
METHODS	15. Certainty assessment: Describe any methods used to assess certainty (or confidence) in the body of evidence for an outcome.	Yes (p.6)
RESULTS	16a. Study selection: Describe the results of the search and selection process (ideally with flow diagram).	Yes (p.7, Fig.1)
RESULTS	16b. Study selection: Cite studies excluded despite appearing eligible, with reasons.	Yes (p7)
RESULTS	17. Study characteristics: Cite each included study and present its characteristics.	Yes (p.7, Table 1)
RESULTS	18. Risk of bias in studies: Present assessments of risk of bias for each included study.	Yes (p.10, Fig S1)
RESULTS	19. Results of individual studies: Present summary	Yes (p.7–10)

	statistics and effect estimates for each study.	
RESULTS	20a–d. Results of syntheses: Present summary estimates, heterogeneity, subgroup, and sensitivity analyses.	Yes (p.10–11)
RESULTS	21. Reporting biases: Present assessments of risk of bias due to missing results (publication bias).	Yes (p.10, Fig S1)
RESULTS	22. Certainty of evidence: Present assessments of certainty (confidence) in the body of evidence.	Yes (p.10-11)
DISCUSSION	23a–d. Discussion: Provide interpretation, limitations of evidence and review processes, and implications for practice/policy/research.	Yes (p.11–15)
OTHER INFORMATION	24. Registration and protocol: Provide registration information or state that review was not registered.	Not registered
OTHER INFORMATION	25. Support: Describe sources of financial or non-financial support.	Yes (p.15)
OTHER INFORMATION	26. Competing interests: Declare any competing interests.	Yes (p.15)
OTHER INFORMATION	27. Availability of data,	Yes (p.15, Supplementary

code and other materials. note)

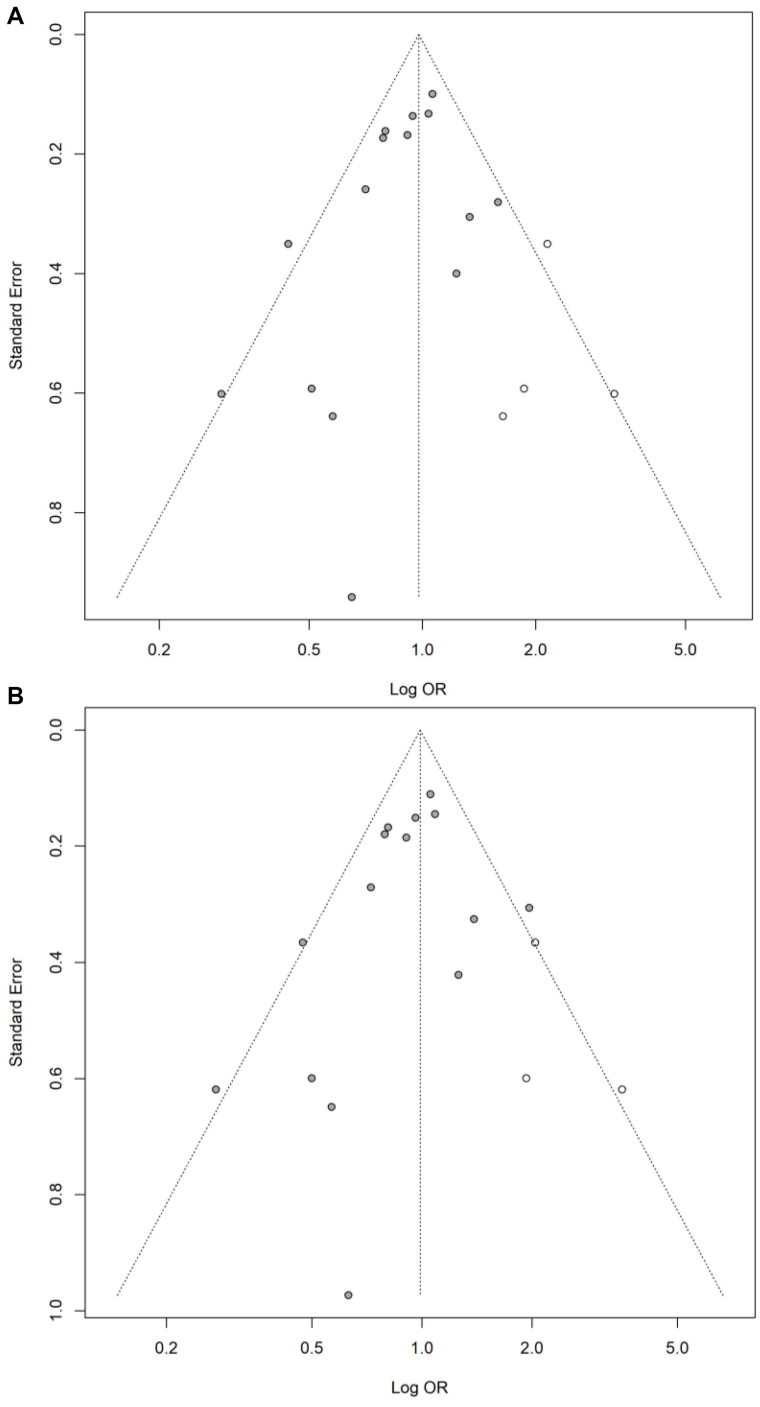

Figure S1. Trim-and-fill funnel plot for (A) the allelic model and (B) the dominant model. To further assess publication bias, Begg's rank correlation test was performed, revealing no significant publication bias (allelic: $p = 0.15$; dominant: $p = 0.15$). The trim-and-fill procedures produced comparable pooled estimates, demonstrating the robustness of the findings.

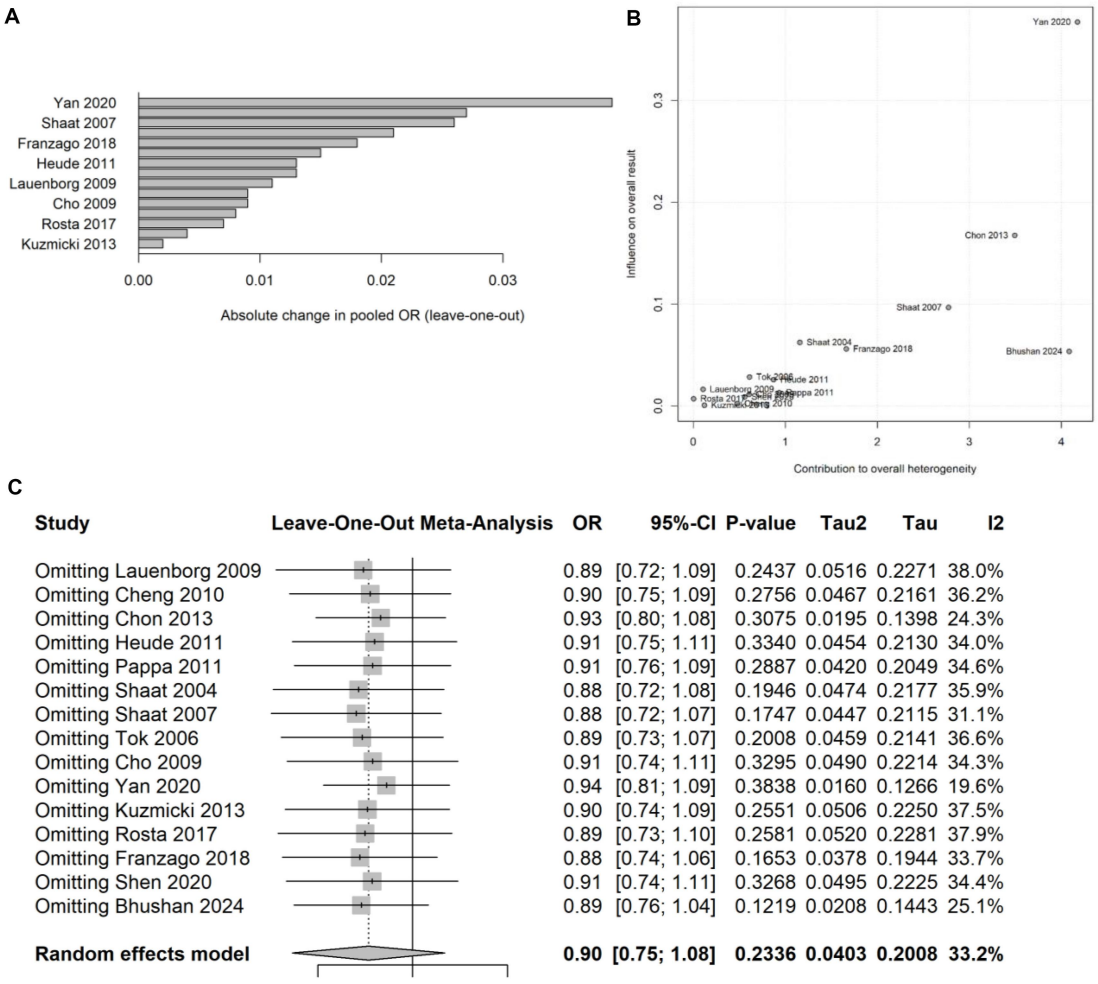

Figure S2. Influence diagnostics for the allelic model. (A) Delta-influence plot illustrating the absolute change in pooled odds ratio (OR) after the exclusion of each study. (B) Baujat plot depicting the relationship between heterogeneity contribution and influence on the pooled effect. (C) Leave-one-out random-effects analysis results.

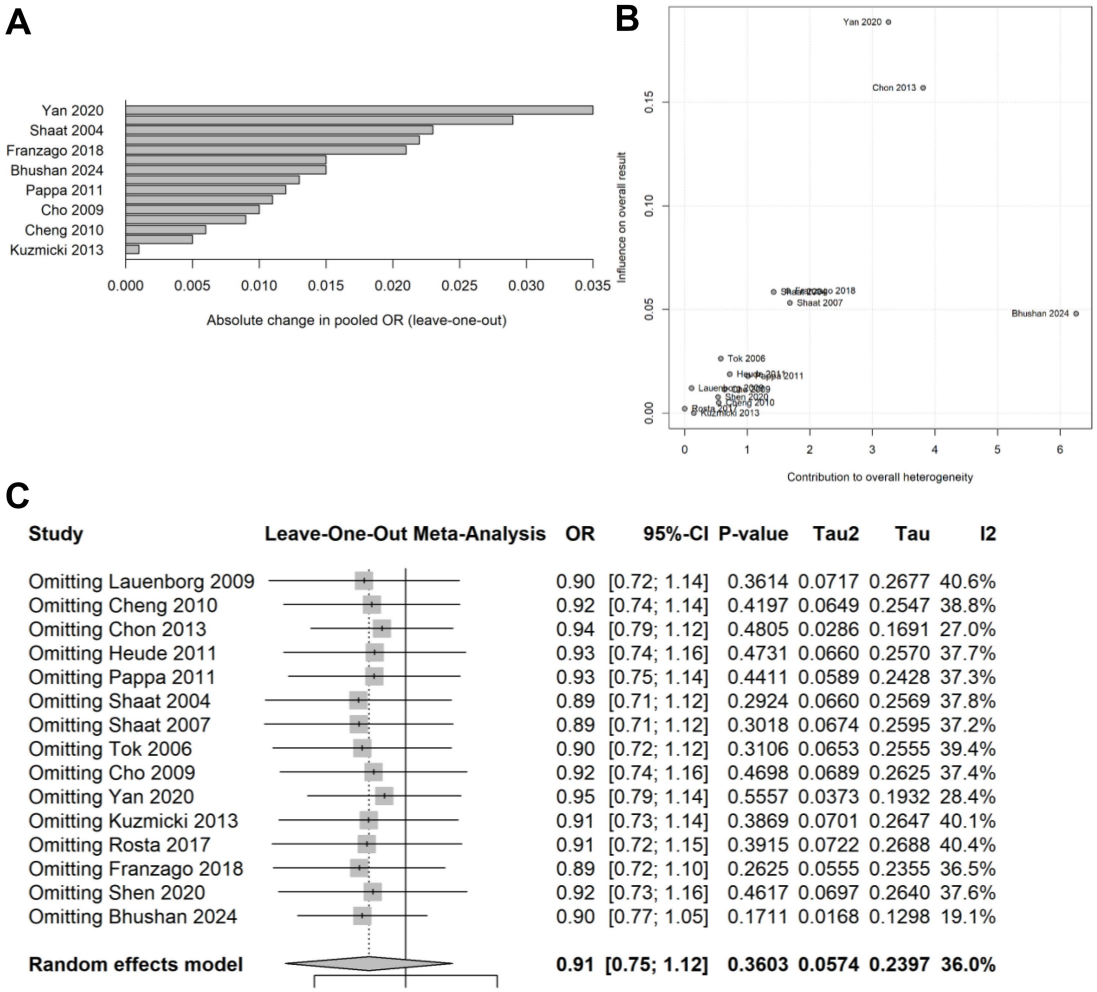

Figure S3. Influence diagnostics for the primary model. (A) Delta-influence plot illustrating the absolute change in pooled odds ratio (OR) following the exclusion of each study. (B) Baujat plot displaying the relationship between heterogeneity contribution and influence on the pooled effect. (C) Leave-one-out random-effects analysis.

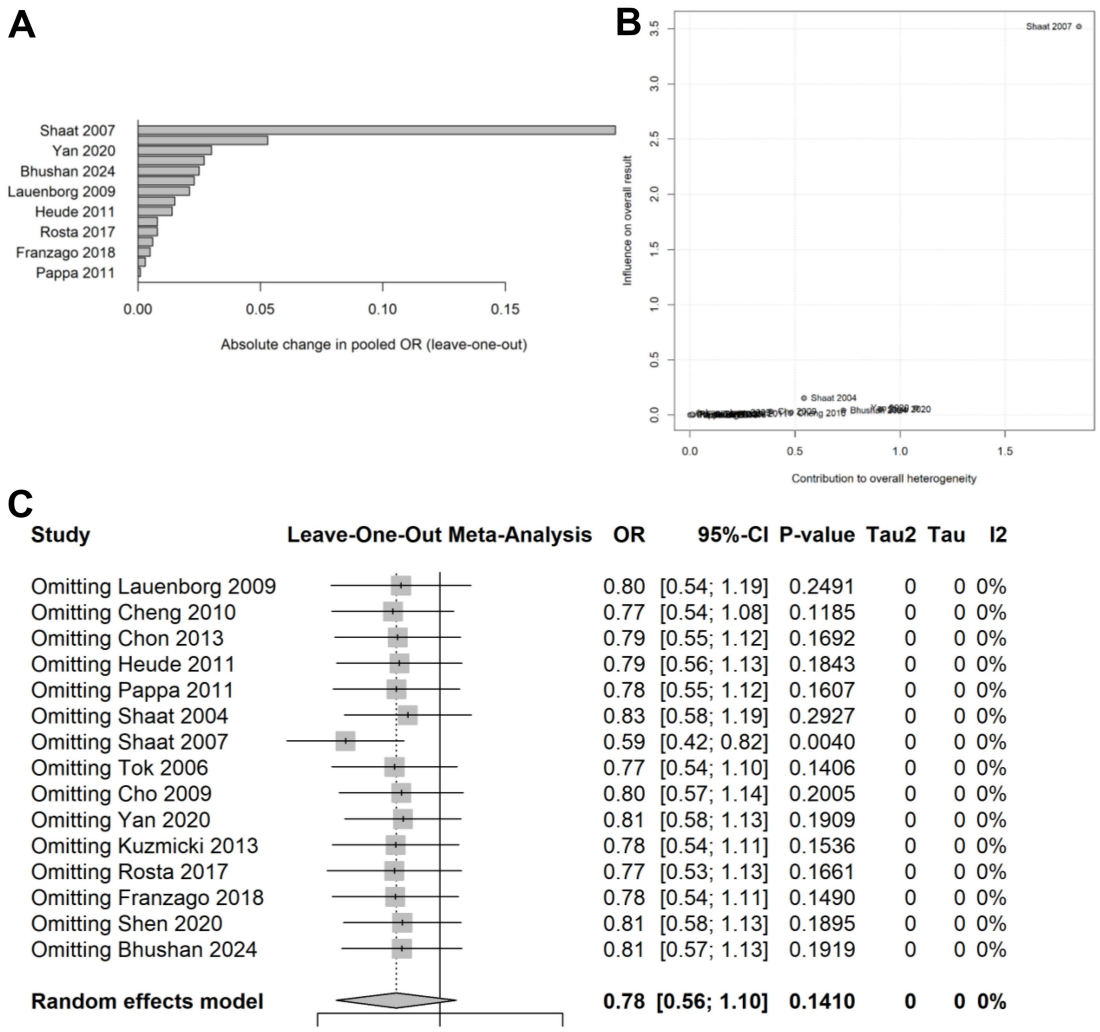

Figure S4. Influence diagnostics for the recessive model. (A) Delta-influence plot illustrating the absolute change in pooled odds ratio (OR) after excluding each study. (B) Baujat plot depicting the relationship between heterogeneity contribution and its influence on the pooled effect. (C) Leave-one-out random-effects analysis.