Supplementary Material

Exposure to Glycolysis-Enhancing Drugs and Risk of Parkinson's Disease: A Meta-Analysis

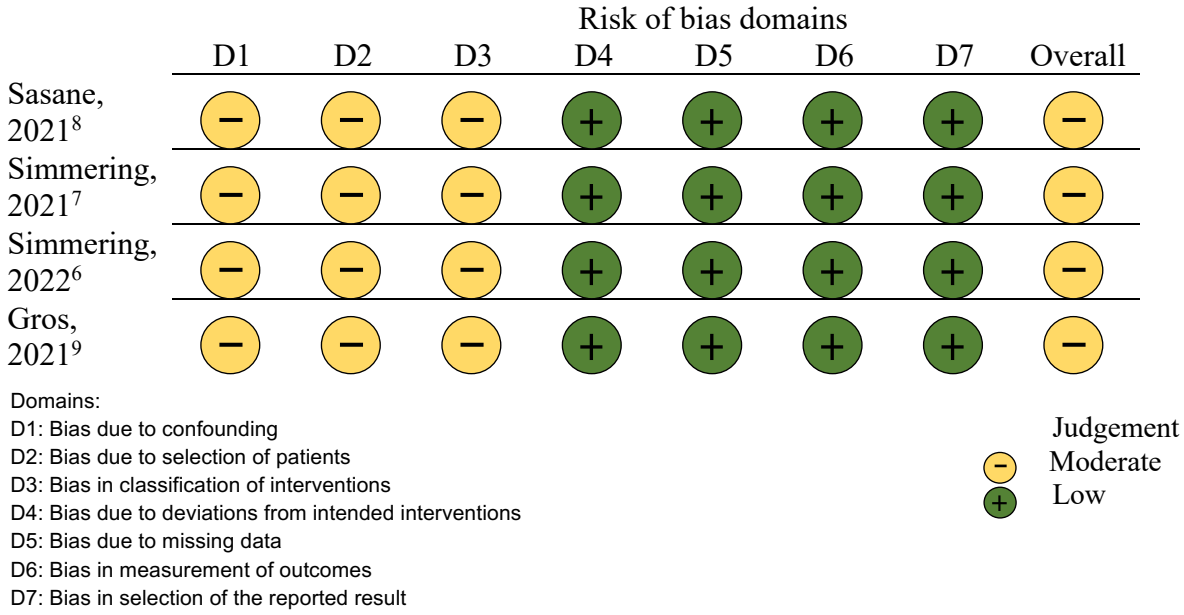
Supplementary Table 1A. Search strategies for systematic review

Database: PubMed **Search strategy:** (PGK1 OR PGK1a OR "PGK1-a" OR phosphoglycerate OR phosphoglyceride OR terazosin OR terazosine OR alfuzosin OR doxazosin OR "glycolysis-enhancing" OR "alpha-adrenergic blockers" OR "alpha-adrenergic blocker" OR "alpha blockers" OR "alpha blocker") AND (Parkinson OR "Parkinson's" OR Parkinsons)
Database: Embase **Search strategy:** (PGK1 OR PGK1a OR "PGK1-a" OR phosphoglycerate OR phosphoglyceride OR terazosin OR terazosine OR alfuzosin OR doxazosin OR "glycolysis-enhancing" OR "alpha-adrenergic blockers" OR "alpha-adrenergic blocker" OR "alpha blockers" OR "alpha blocker") AND (Parkinson OR Parkinsons)
Database: Cochrane **Search strategy:** (PGK1 OR PGK1a OR "PGK1-a" OR phosphoglycerate OR phosphoglyceride OR terazosin OR terazosine OR alfuzosin OR doxazosin OR "glycolysis-enhancing" OR "alpha-adrenergic blockers" OR "alpha-adrenergic blocker" OR "alpha blockers" OR "alpha blocker") AND (Parkinson OR Parkinsons)

Supplementary Table 1B. Reasons for article ineligibility after database search

Number screened	9,275 results
Duplicate reports	117
Not a human RCT or a nonrandomized cohort	9,145
Enrolled patients with PD	8
Overlapping populations	1

Supplementary Table 1C. Risk of bias was assessed by the Risk of Bias in Non-randomized Studies of Interventions (ROBINS-I) tool. No study was considered at high risk of bias



Supplementary Table 1D. Certainty of evidence was deemed moderate overall, as per Grading of Recommendations, Assessment, Development, and Evaluations (GRADE) framework

1D.A. PD incidence (follow-up: median 45 months; assessed with: Hazard ratio)

Certainty assessment						
Participants (studies) Follow-up	Risk of bias	Inconsistency	Indirectness	Imprecision	Publication bias	Overall certainty of evidence
678433 (4 observational studies)	not serious	serious[a]	serious	not serious[b]	publication bias strongly suspected strong association all plausible residual confounding would reduce the demonstrated effect[c]	⨁⨁⨁◯ Moderate

1D.B. Summary of findings

Summary of findings				
Study event rates (%)		Relative effect (95% CI)	Anticipated absolute effects	
With Tamsulosin	With PGK1a		Risk with Tamsulosin	Risk difference with PGK1a
2996/287080 (1.0%)	5164/391353 (1.3%)	**HR 0.80** (0.71 to 0.90)	10 per 1.000	**2 fewer per 1.000** (from 3 fewer to 1 fewer)

CI, confidence interval; HR, hazard Ratio

Explanations:

[a]Inconsistency due to high heterogeneity ($I^2 > 40\%$)

[b]PD diagnosis is indirect

[c]One of the Research Foundations has filed patents for intellectual property related to the use of terazosin and related compounds for neurodegeneration.

Supplementary Table 1E. Analysis of funnel plots showed no evidence of publication bias, although this analysis has limited sensitivity in the setting of a low number of included studies