Supplementary Information

Title: Virtual Reality for Symptom Management During Outpatient Chemotherapy: A Systematic Review and Meta-Analysis of Randomized Controlled Trials

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Table S1. Search strategies used in each database

Database	Platform / syntax basis	Search strategy	Result
PubMed	PubMed field tags	("Virtual Reality"[Mesh] OR "virtual reality"[tiab] OR VR[tiab] OR "immersive virtual reality"[tiab]) AND ("Antineoplastic Combined Chemotherapy Protocols"[Mesh] OR "Antineoplastic Protocols"[Mesh] OR "Neoplasms/drug therapy"[Mesh] OR chemotherap*[tiab] OR "cancer treatment"[tiab] OR oncology[tiab] OR cancer*[tiab] OR neoplasm*[tiab]) AND (randomized controlled trial[pt] OR controlled clinical trial[pt] OR random*[tiab] OR trial[tiab] OR RCT[tiab])	292
Web of Science	Advanced Search using **TS=**	TS=(("virtual reality" OR VR OR "immersive virtual reality") AND (chemotherap* OR "cancer treatment" OR oncology OR cancer* OR neoplasm*) AND ("randomized controlled trial" OR "randomised controlled trial" OR RCT OR random* trial*))	220
Embase	Embase.com / Elsevier-style syntax	('virtual reality'/exp OR 'virtual reality':ti,ab,kw OR vr:ti,ab,kw OR 'immersive virtual reality':ti,ab,kw) AND ('antineoplastic therapy'/exp OR 'cancer chemotherapy'/exp OR 'neoplasm'/exp OR chemotherap*:ti,ab,kw OR 'cancer treatment':ti,ab,kw OR oncology:ti,ab,kw OR cancer*:ti,ab,kw OR neoplasm*:ti,ab,kw) AND ('randomized controlled trial'/de OR 'controlled clinical trial'/de OR random*:ti,ab,kw OR trial:ti,ab,kw OR rct:ti,ab,kw)	1025
Cochrane Library	Search Manager / Wiley syntax	#1 MeSH descriptor: [Virtual Reality] explode all trees #2 virtual reality:ti,ab,kw #3 VR:ti,ab,kw #4 immersive virtual reality:ti,ab,kw #5 #1 OR #2 OR #3 OR #4 #6 MeSH descriptor: [Antineoplastic Combined Chemotherapy Protocols] explode all trees #7 MeSH descriptor: [Antineoplastic Protocols] explode all trees #8 chemotherap*:ti,ab,kw #9 cancer treatment:ti,ab,kw #10 oncology:ti,ab,kw #11 cancer*:ti,ab,kw #12 neoplasm*:ti,ab,kw #13 #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12 #14 #5 AND #13	613

Table S2. GRADE Summary of Findings for Virtual Reality Interventions During Outpatient Chemotherapy

Outcome	No. of studies	Risk of bias	Inconsistency	Indirectness	Imprecision	Publication bias[†]	Certainty of evidence
Anxiety	7	Serious	Serious	Not serious	Serious	Undetected	Very low
Pain	3	Serious	Serious	Not serious	Serious	Undetected	Very low
Quality of life	2	Serious	Not serious	Not serious	Serious	Undetected	Low

Figure S1. Sensitivity Analysis of Anxiety Reduction

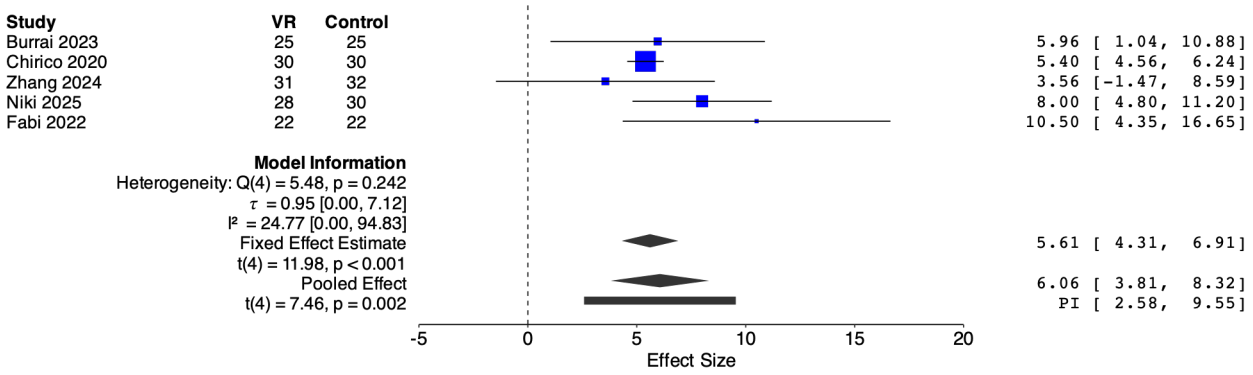

Figure S2. Subgroup analysis comparing breast cancer with other cancer types

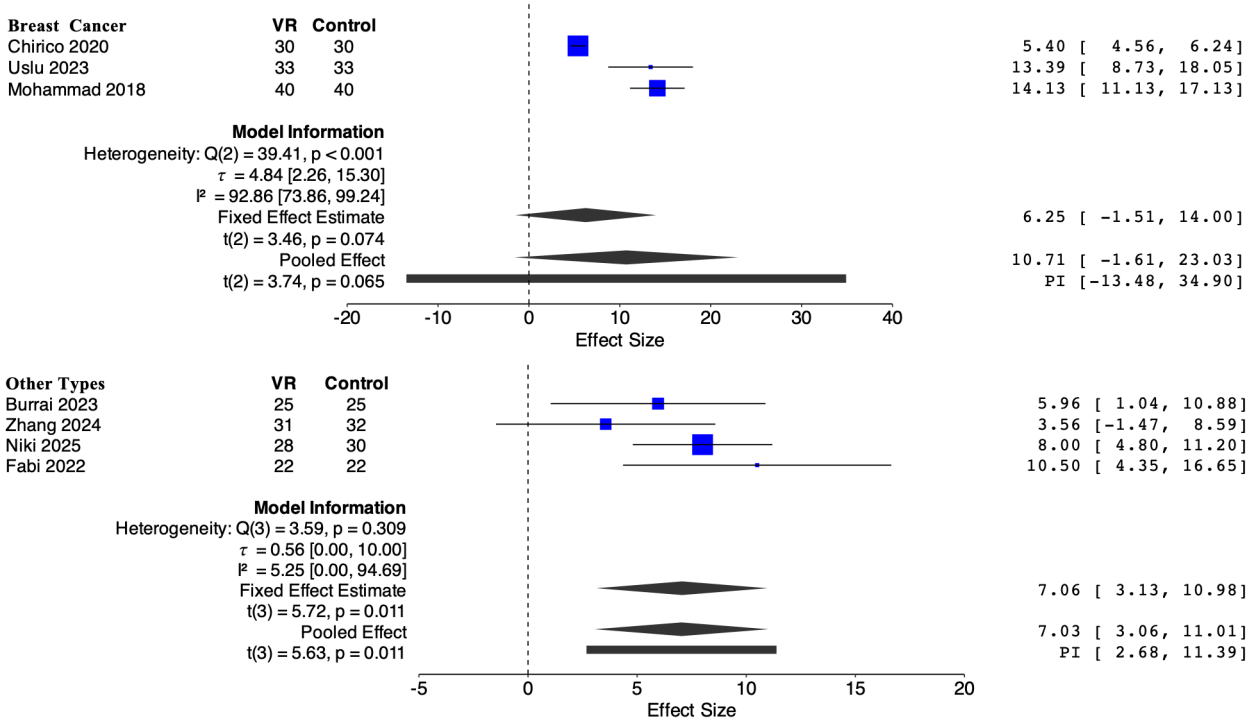

Figure S3. Sensitivity Analysis of Pain Reduction

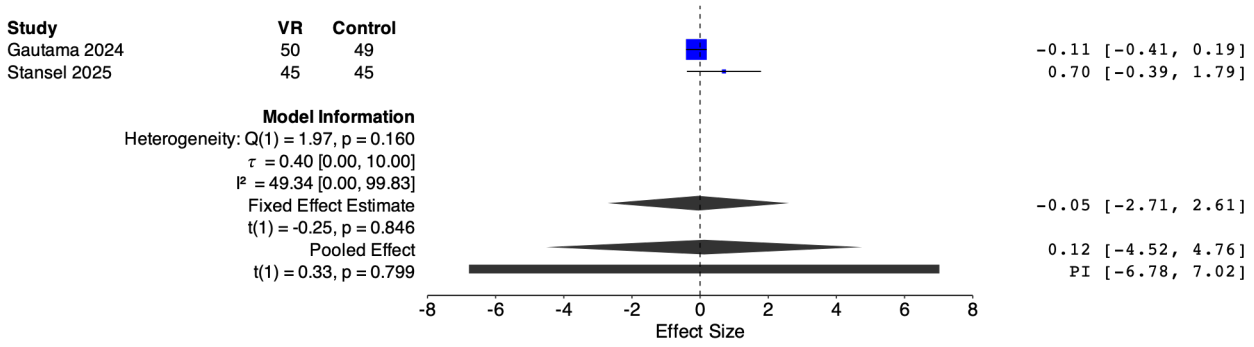

Figure S4. Risk of Bias for Anxiety

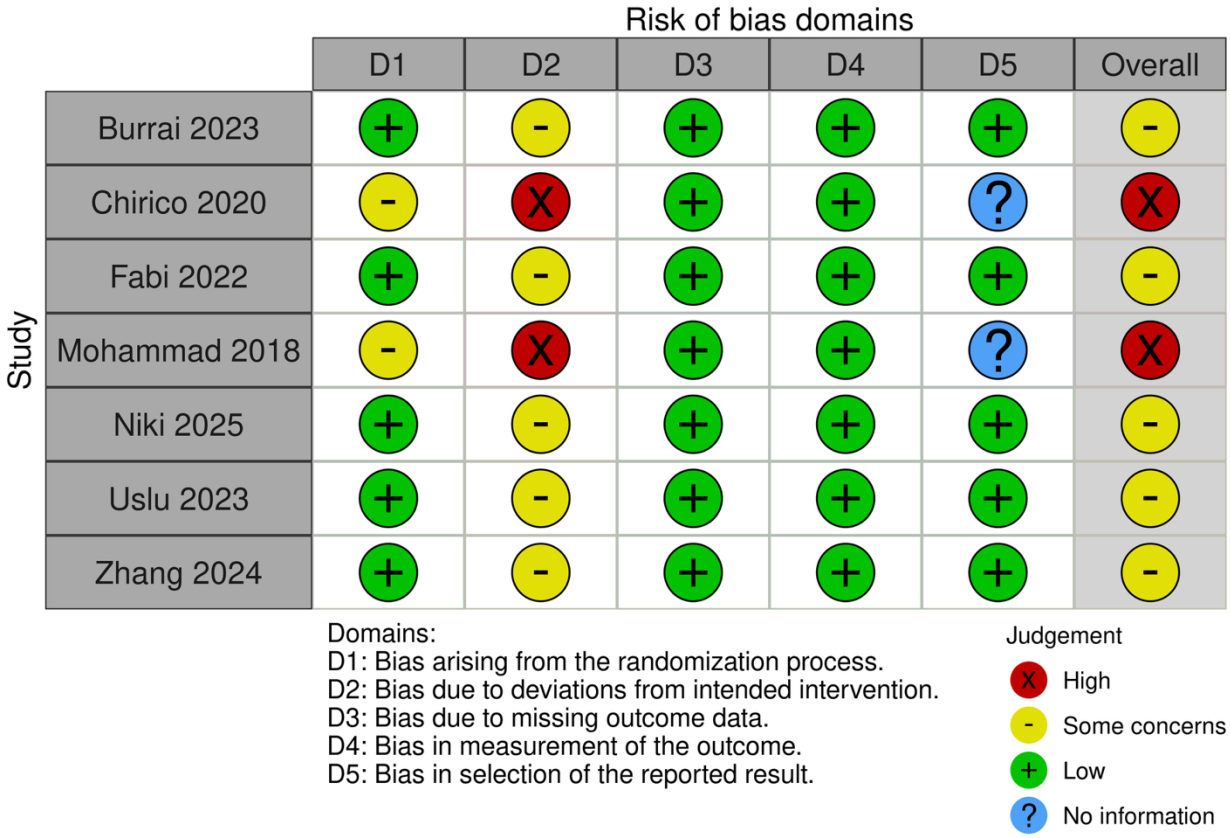

Figure S5. Risk of Bias for Pain

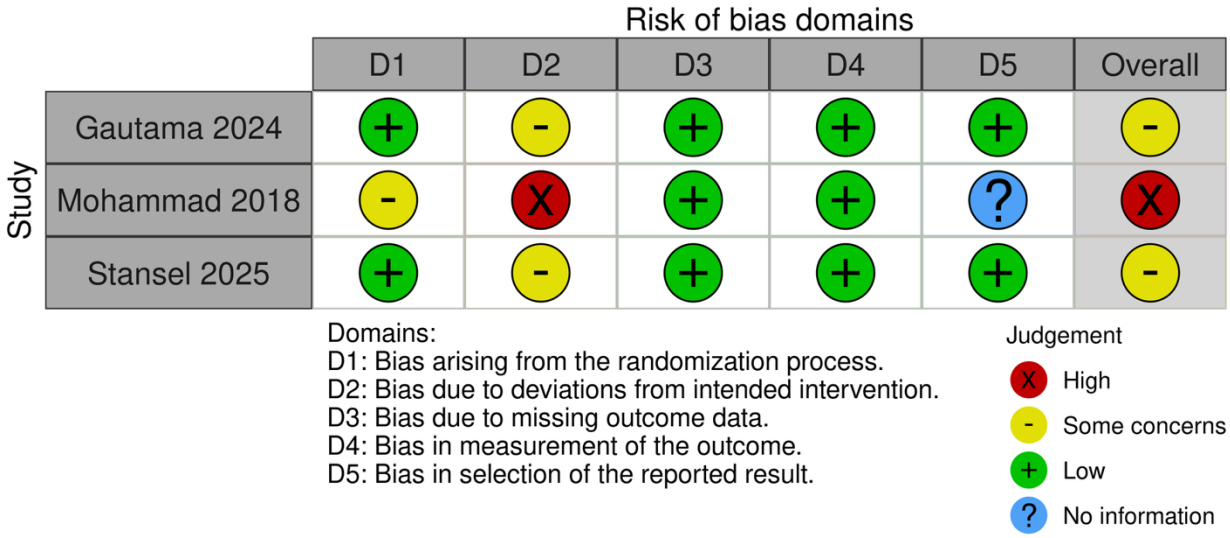

Figure S6. Risk of Bias for Quality of Life

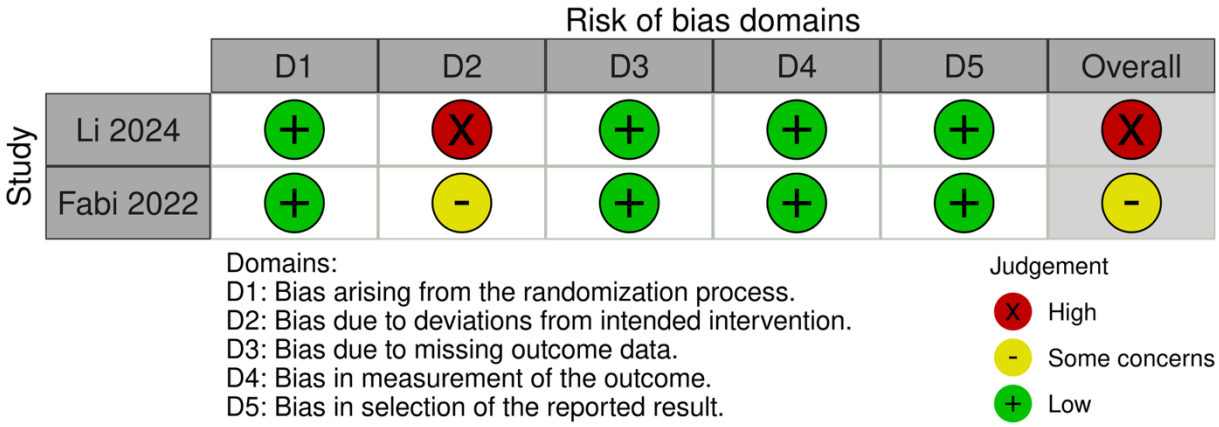

Figure S7. Publication Bias for Anxiety

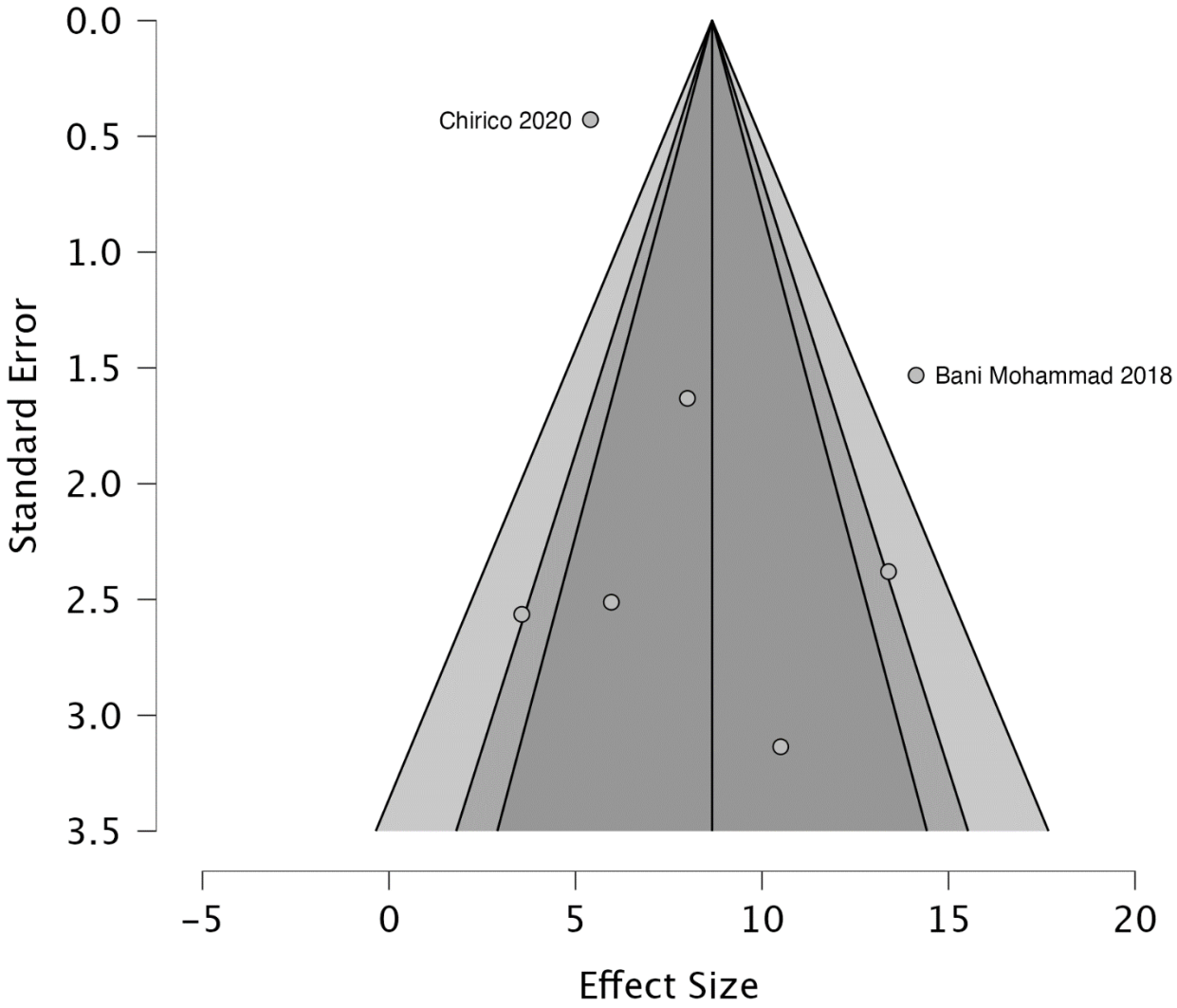

Figure S8. Publication Bias for Pain Reduction

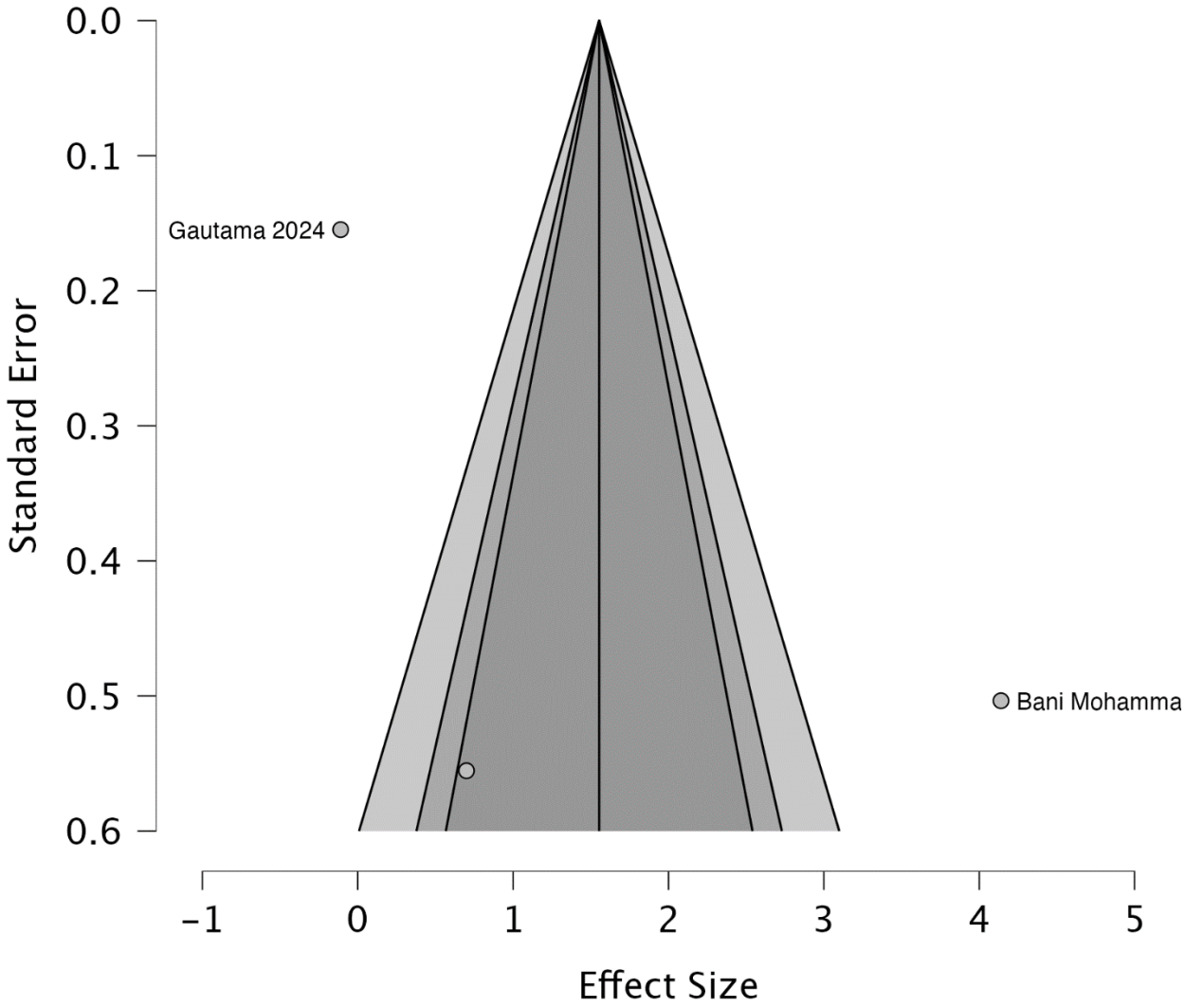
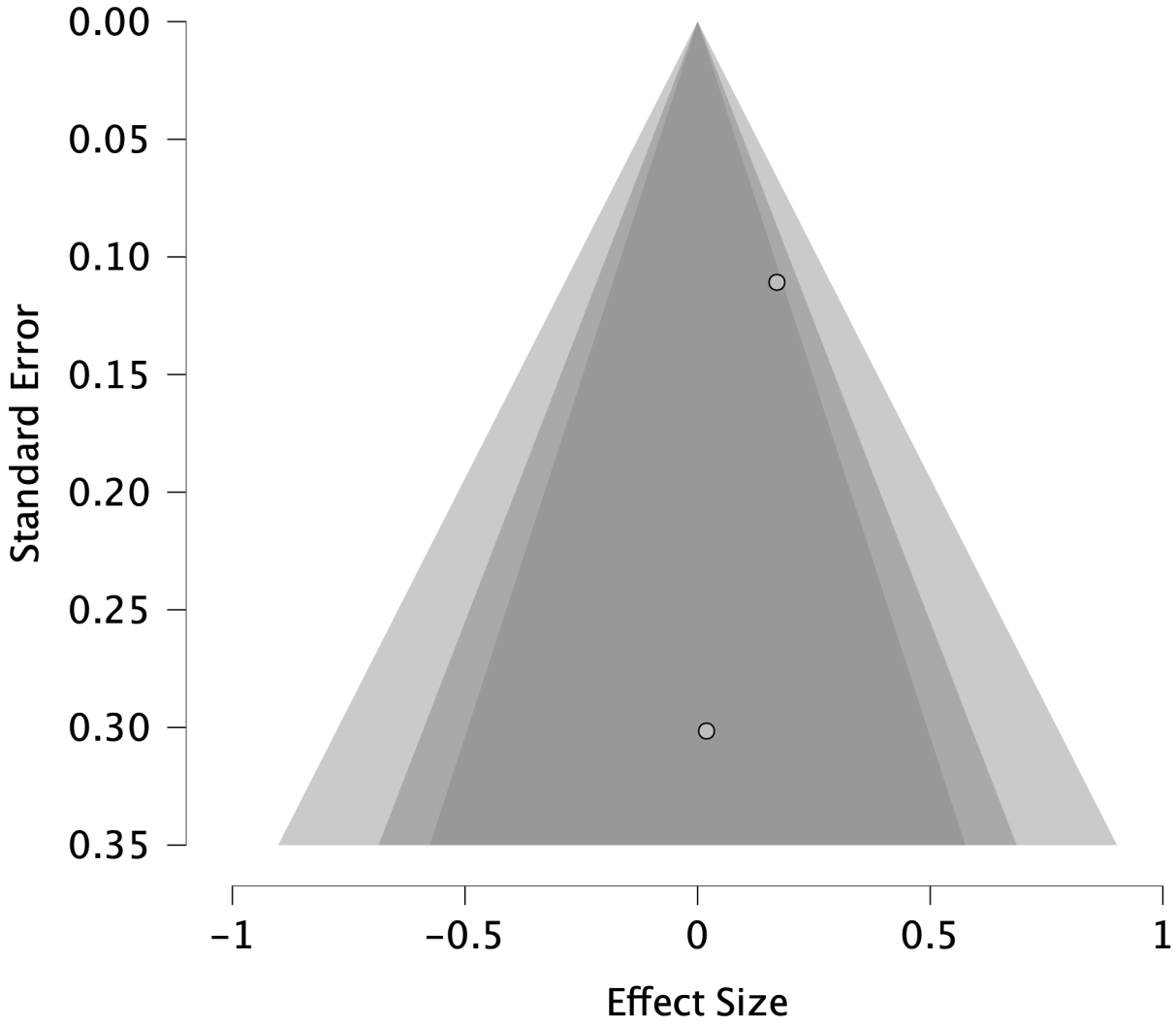
Figure S9. Publication Bias for Quality of Life