

Supplement 1: Search strategies

PubMed:

((("labour"[All Fields] OR "work"[MeSH Terms] OR "work"[All Fields] OR "labor"[All Fields] OR "labor, obstetric"[MeSH Terms] OR ("labor"[All Fields] AND "obstetric"[All Fields]) OR "obstetric labor"[All Fields]) AND ("S-ketamine"[MeSH Terms] OR "S-ketamine"[All Fields] OR ("esketamine"[All Fields])) AND ("depressive disorder"[MeSH Terms] OR ("depressive"[All Fields] AND "disorder"[All Fields]) OR "depressive disorder"[All Fields] OR "depression"[All Fields] OR "depression"[MeSH Terms]) AND ((clinical trial) OR (clinical study)))

Web of science:

(TS=(esketamine) OR TS=(S-ketamine)) AND TS=(depression) AND (TS=(postpartum) OR TS=(postnatal))

Supplement 2A. Risk of bias summary.

Wang 2023	Shen 2023	Liu 2023	Han 2022	Guo 2023	
					Random sequence generation (selection bias)
					Allocation concealment (selection bias)
					Blinding of participants and personnel (performance bias)
					Blinding of outcome assessment (detection bias)
					Incomplete outcome data (attrition bias)
					Selective reporting (reporting bias)
					Other bias

Supplement 2B. Sensitivity analysis for the early stage.

Study omitted	Estimate	[95% Conf. Interval]
Wang (2023)	-2.73723221	-1.4468604 -0.02760406
Liu (2023)	-2.3704414	-4.3615227 -0.37936005
Shen (2023)	-2.6560647	-4.7958856 -0.51624382
Guo (2023)	-2.4832439	-5.1760855 0.20959745
Han (2022)	-2.2448773	-4.755724 0.26596937
Combined	-2.0530829	-3.7693364 -0.33682938

Supplement 2C. Sensitivity analysis for the middle and the later stages.

Study omitted	Estimate	[95% Conf. Interval]	
Wang (2023)	-.14721325	-.49465942	.20023292
Liu (2023)	-1.6674263	-3.3697267	.03487388
Shen (2023)	-1.9683123	-3.8467221	-.08990239
Guo (2023)	-1.9889039	-4.2691817	.29137409
Han (2022)	-1.8795015	-4.0490589	.29005593
Combined	-1.4114868	-2.858624	.03565033

Supplement 2D. Egger linear regression test for publication bias. Analyzed from the early stage and the middle and later stages, respectively.

Egger's test

Std_Eff	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
slope	.6051343	1.695134	0.36	0.745	-4.789539	5.999808
bias	-5.025853	4.529928	-1.11	0.348	-19.44211	9.390399

Std_Eff	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
slope	1.53005	1.203371	1.27	0.293	-2.299614	5.359713
bias	-5.341989	3.07421	-1.74	0.181	-15.1255	4.44152