

Supplementary Table 1 Search strategy

Database	Keywords
PubMed/MEDLINE	"pregnancy" AND ("e-cigarette" OR "vaping" OR "electronic nicotine delivery system") AND ("neonatal outcomes" OR "low birth weight" OR "preterm birth")
Google Scholar	"pregnancy e-cigarette neonatal outcomes" OR "vaping low birth weight preterm birth"
Web of Science	"pregnancy" AND ("vaping" OR "e-cigarette") AND ("neonatal outcomes" OR "low birth weight" OR "preterm birth")
Science Direct	"electronic nicotine delivery system" AND "pregnancy" AND ("preterm birth" OR "LBW" OR "neonatal")
Manual Search	Reference lists of included studies

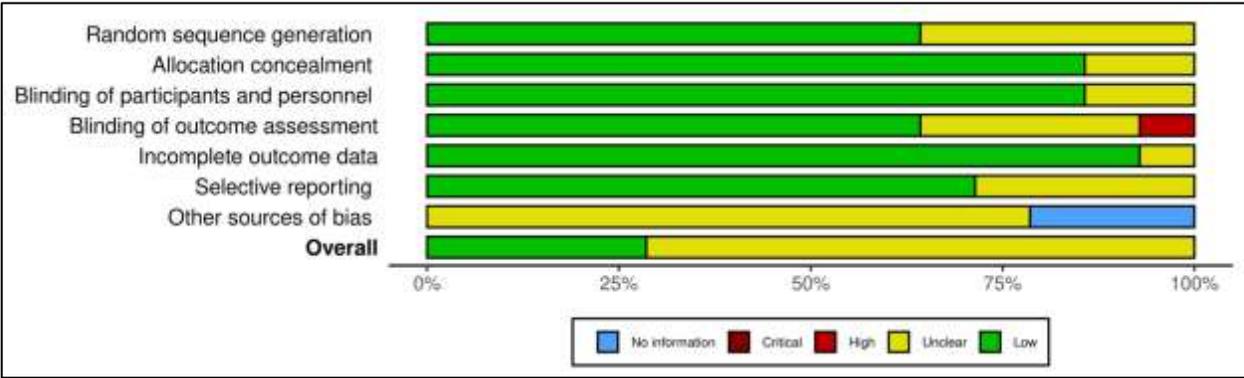
Supplementary Table 2 Inclusion and exclusion criteria

Criteria	Inclusion	Exclusion
Study Design	Original research studies	Reviews, commentaries, editorials, animal studies, gray literature
Population	Pregnant individuals	Non-pregnant populations
Exposure	E-cigarette use, vaping, electronic nicotine delivery systems during pregnancy	Traditional cigarettes use only, dual use without stratification
Outcomes	Neonatal outcomes	Outcomes not related to neonatal health
Language	English	Non-English publications

Supplementary Table 3 Leave one out sensitivity analysis

Outcome	Study Excluded	Pooled OR (95% CI)	Heterogeneity (I²)
LBW	-	1.60 (1.23, 2.09)	83%
	Ammar et al. 2023	1.62 (1.15, 2.28)	79%
	Kim et al. 2020	1.58 (1.12, 2.05)	87%
	McDonnell et al.	1.72 (1.33, 2.24)	84%
	Regan & Pereira 2021	1.62 (1.20, 2.18)	87%
	Regan et al. 2021	1.49 (1.32, 1.68)	0%
	-	1.95 (0.74, 5.14)	99%
SGA	Ammar et al. 2023	1.79 (1.36, 2.35)	80%
	Cardens et al. 2019	1.70 (1.32, 2.19)	84%

	Cardens et al. 2020	1.76 (1.37, 2.25)	83%
	Hawkins et al. 2022	1.86 (1.46, 2.37)	81%
	Kim et al. 2020	1.75 (1.32, 2.32)	84%
	Nanniga et al. 2023	1.68 (1.31, 2.17)	84%
	Regan & Pereira 2021	1.78 (1.36, 2.32)	84%
	Regan et al. 2021	1.68 (1.25, 2.27)	83%
	Shittu et al. 2022	1.69 (1.29, 2.22)	84%
	Wang et al. 2020	1.69 (1.29, 2.21)	84%
	Wang et al. 2022	1.58 (1.27, 1.96)	73%
	Wen et al. 2023 (1)	1.77 (1.35, 2.31)	84%
	-	1.73 (1.34, 2.22)	83%
	Ammar et al. 2023	1.53 (1.29, 1.80)	41%
	Hawkins et al. 2022	2.04 (0.70, 5.95)	99%
	Kim et al. 2020	2.05 (0.69, 6.11)	99%
PTB	Opondo et al. 2021	2.10 (0.74, 5.90)	99%
	Regan & Pereira 2021	2.13 (0.75, 6.03)	99%
	Regan et al. 2021	1.98 (0.59, 6.68)	99%
	Wang et al. 2020	2.09 (0.73, 5.97)	99%
	Wang et al. 2022	1.92 (0.64, 5.76)	99%



Supplementary Figure 1 Overall risk of bias assessment