

	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
CASPIAN	+	+	-	+	+	+	?
Checkmate-032	+	+	-	+	+	+	?
Checkmate-331	+	+	-	+	?	?	?
Checkmate-451	+	+	+	+	?	+	?
ECOG-ACRIN EA5161	+	+	?	+	?	+	?
IFCT-1603	+	+	?	+	+	+	?
Impower-133	+	+	+	+	+	+	+
Keynote-604	+	+	+	+	?	+	+
Reck et al, 2016	+	+	+	+	+	+	+

Figure S1 Risk of bias summary. Review of authors' judgements about each risk of bias item for each included study. "+" low risk of bias; "?" unevaluable risk of bias; "-" high risk of bias.

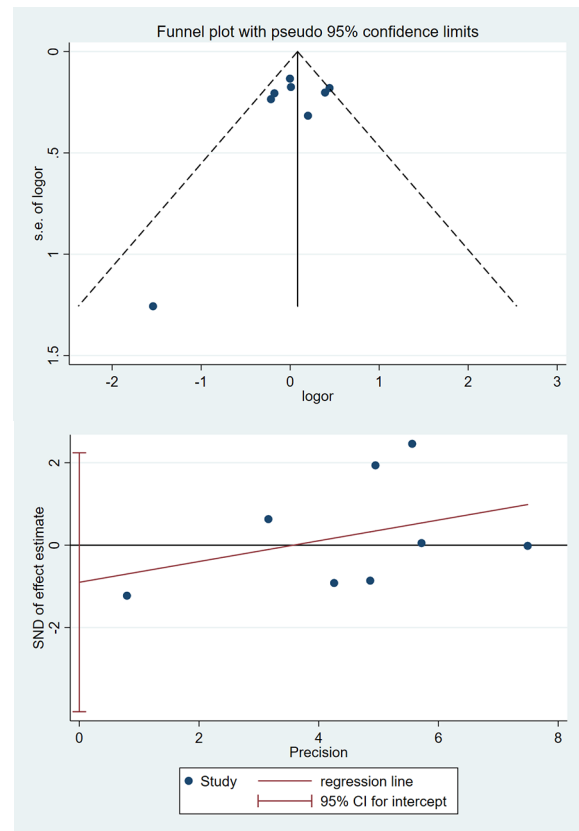


Figure S2 Funnel plot and Egger's test for publication bias.

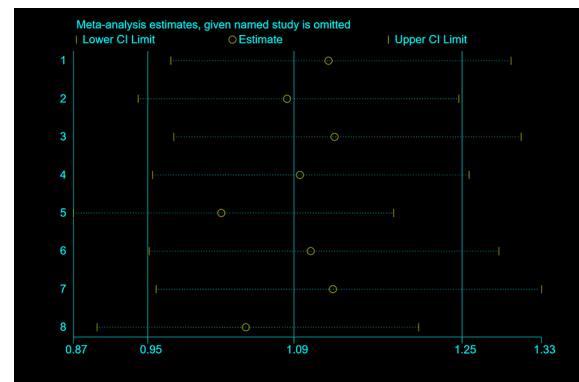


Figure S3 Sensitivity analysis.

Table S1 Search strategies

Search strategies in PubMed

- #1 Small Cell Lung Carcinoma[mh]
- #2 Small Cell Lung Cancer [tiab] OR Oat Cell Lung Cancer [tiab] OR Small Cell Cancer of the Lung [tiab] OR Carcinoma, Small Cell Lung [tiab] OR Oat Cell Carcinoma of Lung [tiab]
- #3 #1 OR #2
- #4 Immune Checkpoint Inhibitors [mh] OR Immune Checkpoint Blockers [tiab] OR PD-L1 Inhibitors [tiab] OR Programmed Death-Ligand 1 Inhibitors [tiab] OR CTLA-4 Inhibitors [tiab] OR Cytotoxic T-Lymphocyte–Associated Protein 4 Inhibitors [tiab] OR PD-1 Inhibitors [tiab] OR Programmed Cell Death Protein 1 Inhibitor [tiab] OR Nivolumab [tiab] OR Atezolizumab [tiab] OR Durvalumab [tiab] OR Camrelizumab [tiab] OR Sintilimab [tiab] OR Avelumab [tiab] OR Ipilimumab [tiab] OR Tremelimumab [tiab]
- #5 Randomized Controlled Trial [pt] OR Controlled Clinical Trial [pt] OR Randomized [tiab] OR Placebo [tiab] OR Clinical Trials as topic [mesh: noexp] or Randomly [tiab] OR Trial [ti] NOT animals [mh] NOT humans [mh]
- #6 #3 AND #4 AND #5

Search strategies in Cochrane Library

- #1 MeSH descriptor:[Small Cell Lung Carcinoma] explode all trees
 - #2 (Small Cell Lung Carcinoma OR Small Cell Lung Cancer OR Oat Cell Lung Cancer OR Small Cell Cancer of the Lung OR Carcinoma, Small Cell Lung OR Oat Cell Carcinoma of Lung):ti,ab,kw
 - #3 #1 OR #2
 - #4 (Immune Checkpoint Inhibitors OR Immune Checkpoint Blockers OR PD-L1 Inhibitors OR Programmed Death-Ligand 1 Inhibitors OR CTLA-4 Inhibitors OR Cytotoxic T-Lymphocyte–Associated Protein 4 Inhibitors OR PD-1 Inhibitors OR Programmed Cell Death Protein 1 Inhibitor OR Nivolumab OR Atezolizumab OR Durvalumab OR Camrelizumab OR Sintilimab OR Avelumab OR Ipilimumab OR Tremelimumab):ti,ab,kw
 - #5 #3 AND #4
-