

Systematic Review With Meta-analysis of Cisplatin vs Carboplatin in Resectable NSCLC with Neoadjuvant/Perioperative Chemoimmunotherapy

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INTRODUCTION

- This meta-analysis indirectly compares the efficacy of cisplatin versus carboplatin in the neoadjuvant and perioperative setting for resectable NSCLC.

METHODS

- We searched Ovid MEDLINE, Embase, Web of Science, Cochrane CENTRAL, and ClinicalTrials.gov from inception to February 17, 2026 for RCTs enrolling adults with resectable NSCLC receiving neoadjuvant or perioperative chemoimmunotherapy with cisplatin- or carboplatin-based regimens.
- Included studies reported outcomes for cisplatin- or carboplatin-based chemoimmunotherapy regimens.

CONCLUSION

- In this systematic review with meta-analysis, with the current evidence available, no differences in efficacy were observed between cisplatin-based chemoimmunotherapy and carboplatin-based chemoimmunotherapy

REFERENCES



Please scan the QR code for the list of references of included reports.

RESULTS

Figure 1: PRISMA Diagram

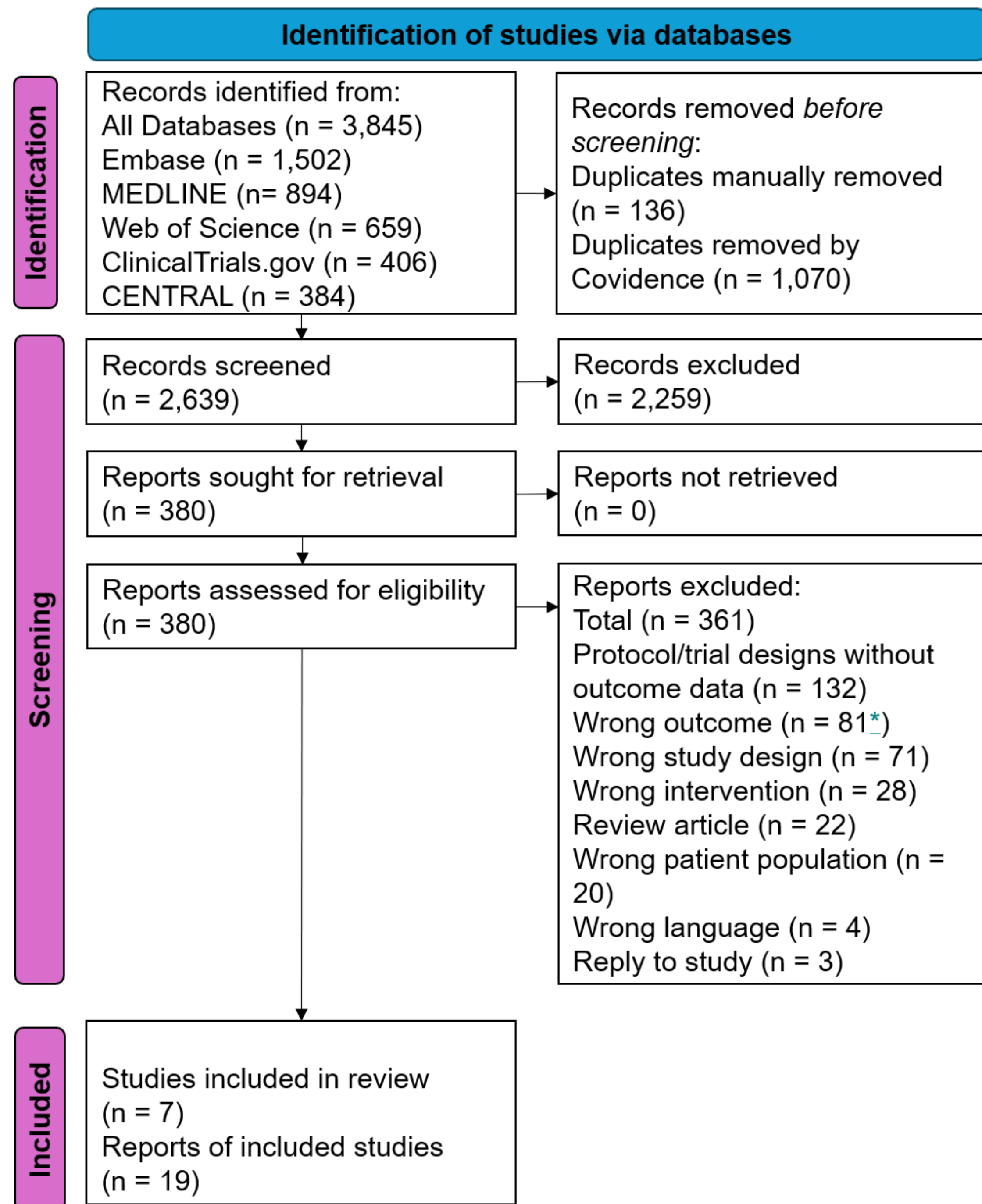


Table 1: Study Characteristics

Trial	Phase	Experimental Arm	Control Arm	Cycles	Funding Source	Region	Enrollment Period	Stage	TNM Edition	Cisplatin, N (Exp/Control)	Carboplatin, N (Exp/Control)
Trials that included cisplatin- and carboplatin-based chemotherapy backbone											
CheckMate 77T	III	Chemo + perioperative nivolumab	Chemo + placebo	4	Industry	Global	Nov2019–Apr 2022	IIA-IIIB	8th	97 (55/42)	347 (167/180)
CheckMate 816	III	Chemo + nivolumab	Chemo alone (open-label)	3	Industry	Global	Mar 2017–Nov 2019	IB-IIIA	7th	258 (124/134)	72 (39/33)
AEGEAN	III	Chemo + perioperative durvalumab	Chemo + placebo	4	Industry	Global	Jan 2019–Apr 2022	II-IIIB	8th	196 (100/96)	544 (266/278)
RATIONALE-315	III	Chemo + perioperative tislelizumab	Chemo + placebo	3–4	Industry	China	Jun 2020–Aug 2022	II-IIIA	8th	244 (120/124)	156 (80/76)
Trials that included a cisplatin-based chemotherapy backbone only											
KEYNOTE-671	III	Chemo + perioperative pembrolizumab	Chemo + placebo	4	Industry	Global	May 2018–Dec 2021	II-IIIB	8th	797 (397/400)	—
Trials that included a carboplatin-based chemotherapy backbone only											
NADIM II	II	Chemo + perioperative nivolumab	Chemo alone (open-label)	3	Mixed	Spain	Jun 2019–Feb 2021	IIIA-IIIB	8th	—	86 (57/29)
NEOSCORE	II	3-cycle chemo + sintilimab	2-cycle chemo + sintilimab (open-label)	3 vs 2	Government	China	Jul 2020–Sep 2021	IB-IIIA	8th	—	60 (31/29)

Figure 2B: Pathologic and Surgical Outcomes by Platinum Backbone in Patients Who Received Chemoimmunotherapy

