

INPLASY

Combination of Envafolelimab and Platinum-Based Chemotherapy as a potential First-line regimen for Lung Cancer: systematic review and meta-analysis

INPLASY202610002

doi: 10.37766/inplasy2026.1.0002

Received: 2 January 2026

Published: 2 January 2026

Ye, X; Zhou, X; Geng, H; Ma, ML; Lai, WS; Wu, T.

Corresponding author:

Xin Ye

2718310677@qq.com

Author Affiliation:

Cancer Research Center, School of Medicine, Xiamen University, Xiamen, China.

ADMINISTRATIVE INFORMATION

Support - Xiamen Municipal Natural Science Foundation 3502Z202573036.

Review Stage at time of this submission - Data extraction.

Conflicts of interest - None declared.

INPLASY registration number: INPLASY202610002

Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 2 January 2026 and was last updated on 2 January 2026.

INTRODUCTION

Review question / Objective The aim of this study is to examine the efficacy of Envafolelimab in the treatment of lung cancer, and all the selected studies were single-arm clinical studies.

Condition being studied Envafolelimab is the world's first subcutaneously administered PD-L1 inhibitor, offering advantages such as high solubility and absence of infusion reactions. While Envafolelimab demonstrates favorable efficacy in treating a subset of MSI-H/dMMR subtype lung cancers, its feasibility for broad-spectrum treatment in the lung cancer field remains to be determined.

METHODS

Participant or population This review focuses on patients with histologically or cytologically confirmed lung cancer who have received subcutaneous injections of Envafolelimab.

Intervention Envafolelimab.

Comparator None.

Study designs to be included Single-arm clinical studies.

Eligibility criteria (1) The primary study subjects must be patients with histologically or cytologically confirmed lung cancer; (2) Envafolelimab can be used in combination with different treatment modalities (e.g., radio-therapy, chemotherapy, surgery, or targeted therapy).

Information sources PubMed, Embase and Cochrane Library.

Main outcome(s) ORR.

Additional outcome(s) DCR, $\geq$ G3 TRAE.

Quality assessment / Risk of bias analysis The Methodological Index for Non-randomized Studies

(MINORS) checklist was used to assess the quality of the included studies.

Strategy of data synthesis All statistical analyses were performed using STATA software version 15.1 (STATA, College Station, Texas 77845 USA). The metaprop command was used to perform a meta-analysis, in which data were pooled to calculate odds ratios (OR) and their 95% confidence intervals (CI), and a forest plot was generated for visualization. A Q test with $P > 0.05$ or $I^2 < 50\%$ indicated that there was no significant heterogeneity among the studies, so a fixed-effect model was adopted; otherwise, a random-effects model was used.

Subgroup analysis Subgroup analyses were conducted based on Accepted Line of Therapy (0 or ≥ 1), Medications of Intervention (whether Envafolelimab was used in combination with chemotherapy, whether it was combined with platinum-based chemotherapy, and whether it was combined with platinum-based chemotherapy and different targeted drugs) and Pathologic Subtype.

Sensitivity analysis Sensitivity analysis was performed using the metainf command in Stata software to assess the reliability of the data. Sensitivity analysis was performed using the metainf command to assess the reliability of the data.

Country(ies) involved China.

Keywords Envafolelimab; Lung cancer; Platinum-based chemotherapy; First-line; Meta-analysis.

Contributions of each author

Author 1 - Xin Ye.

Email: 2718310677@qq.com

Author 2 - Xiao Zhou.

Author 3 - Hao Geng.

Author 4 - Mengli MA.

Author 5 - Weisong Lai.

Author 6 - Ting Wu.