INPLASY

Prognostic and clinicopathological value of soluble programmed cell death ligand-1 (sPD-L1) in patients with colorectal cancer: a meta-analysis

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ADMINISTRATIVE INFORMATION

Support - None.

Review Stage at time of this submission - Completed but not published.

Conflicts of interest - None declared.

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Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 31 May 2025 and was last updated on 31 May 2025.

INTRODUCTION

Review question / Objective Many studies have explored the prognostic value of soluble programmed-cell death 1 ligand 1 (sPD-L1) in colorectal cancer (CRC), however, the results remained controversial. Therefore, we performed this meta-analysis to identify the accurate prognostic role of sPD-L1 in patients with CRC.

Condition being studied We retrieved Web of Science, PubMed, Embase, and Cochrane Library from inception to February 24, 2025.

METHODS

Participant or population Patients with CRC.

Intervention We computed combined hazard ratios (HRs) and 95%CIs for estimating sPD-L1's value in forecasting overall survival (OS) as well as disease-free survival (DFS) in CRC.

Comparator CRC patients with nornal level of sPD-L1.

Study designs to be included Cohort studies, including prospective and retrospective cohorts.

Eligibility criteria The inclusion criteria were as follows: (1) patients were pathologically diagnosed with CRC; (2) studies used ELISA to detect the levels of sPD-L1; (3) studies investigated the association between sPD-L1 and survival outcomes of CRC; (4) studies reported the hazard ratios (HRs) and 95% confidence intervals (CIs) of prognosis; (5) a cut-off value of sPD-L1 was identified.

Information sources PubMed, Web of Science, Embase, and Cochrane Library.

Main outcome(s) OS and DFS.

Quality assessment / Risk of bias analysis We evaluated the quality of each original study tool with the Newcastle–Ottawa Scale (NOS).

Strategy of data synthesis Combined HRs and 95%CIs were calculated to estimate the prognostic value of sPD-L1 for OS and DFS in CRC.

Subgroup analysis Subgroup analysis was conducted.

Sensitivity analysis Sensitivity analysis was carried out.

Language restriction English.

Country(ies) involved China.

Keywords PD-L1; immunotherapy; meta-analysis; prognosis; colorectal cancer.

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