

INPLASY

Efficacy and safety of PD-1/PD-L1 and CTLA-4 immune checkpoint inhibitors in the treatment of advanced colorectal cancer :a systematic review and meta-analysis

INPLASY202480030

doi: 10.37766/inplasy2024.8.0030

Received: 05 August 2024

Published: 06 August 2024

Corresponding author:

NING MA

maning2022@yeah.net

Author Affiliation:

Department of General Surgery, The First Affiliated Hospital of Shandong First Medical University.

Ma, N; Hou, SF; Song, DD.

ADMINISTRATIVE INFORMATION

Support - The 2023 Youth Talent Promotion Project of Shandong Medical Association (Project No. 2023_LC_0228).

Review Stage at time of this submission - Preliminary searches.

Conflicts of interest - None declared.

INPLASY registration number: INPLASY202480030

Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 06 August 2024 and was last updated on 06 August 2024.

INTRODUCTION

Review question / Objective This study investigated the efficacy and safety of PD-1/PD-L1 inhibitors combined with CTLA-4 inhibitors in patients with advanced colorectal cancer.

Condition being studied The treatment was combined therapy.

METHODS

Participant or population The patient population was patients with advanced colorectal cancer.

Intervention PD-1/PD-L1 inhibitors combined with CTLA-4 inhibitors were used.

Comparator Other therapies.

Study designs to be included I/II/III/IV trials.

Eligibility criteria Trials were included if the following criteria were met (1):patients with metastatic colorectal cancer aged 18 years or older were enrolled; (2):a PD-1/PD-L1 and CTLA-4 inhibitors with or without other standard treatments was given to one of the study arms; and (3):outcomes of interest in terms of efficacy (i.e. overall survival [OS],progression-free survival [PFS], objective response rate [ORR], disease control rate [DCR],and safety (i.e. treatment-related adverse events (TRAEs) and \geq grade 3 TRAEs were reported.

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

Main outcome(s) mOS、mPFS、ORR、DCR、TRAEs、 \geq grade 3 TRAEs.

Quality assessment / Risk of bias analysis use the methodological index for non-randomized studies (MINORS).

Strategy of data synthesis We use STATA version 18.0. A random-effect model was applied if obvious heterogeneity was present ($I^2 > 50\%$), otherwise, a fixed-effect model was chosen.

Subgroup analysis Whether to combine other treatment therapies.

Sensitivity analysis Stata software sensitivity analysis, by deleting one after effect of changes to reflect the sensitive of the article.

Country(ies) involved China.

Keywords immune checkpoint inhibitors, colorectal cancer, immunotherapy, PD-1, PD-L1, CTLA-4.

Contributions of each author

Author 1 - Ning Ma.

Email: maning2022@yeah.net

Author 2 - Shufu Hou.

Author 3 - Dandan Song.