INPLASY

Prognostic Role of Systemic Immune-Inflammation Index in Gastric Cancer Treated With Immune Checkpoint Inhibitors: A Meta-Analysis

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ADMINISTRATIVE INFORMATION

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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 09 December 2023 and was last updated on 09 December 2023.

INTRODUCTION

Review question / Objective To assess the predictive importance of systemic immune-inflammation index in patients receiving immune checkpoint inhibitors treatment of gastric cancer, we carried out this meta-analysis.

Condition being studied ncluded patients with histopathologically confirmed GC who were treated with ICIs.

METHODS

Participant or population Gastric cancer treated with ICIs.

Intervention Based on the value of SII.

Comparator The low levels of SII.

Study designs to be included Retrospective Cohort Study.

Eligibility criteria (a) included patients with histopathologically confirmed GC who were treated with ICIs; (b) reported hazard ratios (HRs) and 95% confidence intervals (CIs) for OS or progression-free survival (PFS), or provided sufficient data to calculate these measures; (c) reported relative risks (RRs) with 95% CIs for objective response rate (ORR) or disease control rate (DCR), or included sufficient data to calculate these measures; and (d) they were published in English.

Information sources PubMed, Embase, and Cochrane Library databases.

Main outcome(s) OS and PFS.

Quality assessment / Risk of bias analysis The quality of all primary studies was independently evaluated by three researchers using the Newcastle-Ottawa Quality Assessment Scale (NOS). To evaluate potential publication bias, Begg's test, Egger's test, and a funnel plot were employed.

Strategy of data synthesis “Systemic immune-inflammation index”, “SII”, “gastric cancer”, “immunotherapy”, “immune checkpoint inhibitor”, “PD-L1”, “PD-1”, “prognosis”, and “prognostic” were the search keywords utilized. To locate more relevant research, references referenced in chosen papers were also collected.

Subgroup analysis Subgroup analysis was conducted based on sample size, cut-off value, treatment, and the Cox regression analysis method.

Sensitivity analysis A sensitivity analysis was carried out by systematically removing each study to assess its influence on the overall results.

Country(ies) involved China (The Second Affiliated Hospital of Nanjing Medical University).

Keywords SII, Immune checkpoint inhibitors, Prognosis, Gastric cancer, Meta-analysis.

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