INPLASY PROTOCOL

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None declared.

Correlation of neutrophil to lymphocyte ratio and prognosis in patients with stage II-IV esophageal squamous cell carcinoma: a systematic review and meta-analysis

Chen, Z[1]; Wang, W[2]; Ma, H[3]; Wang, N[4]; Li, J[5].

Review question / Objective: **This study aimed to summarize the prognostic correlation of NLR at baseline in patients with stage II-IV esophageal squamous cell carcinoma. P: Patients with stage II-IV esophageal squamous cell carcinoma; I: High level of NLR at baseline; C: Low level of NLR at baseline; O: Survival outcome; S: RCT studies and retrospective studies.**
Condition being studied: **The incidence of esophageal cancer in eastern countries increases yearly, and most patients with esophageal cancer are diagnosed at a non-early stage.**
Eligibility criteria: **Inclusion criteria: 1. The study population included patients with squamous esophageal cancer; 2. There is a definite NLR cutoff value; 3. The number of people included in the study should not be too small; 4. RCT studies or retrospective studies. Exclusion criteria: 1. Survival outcome indicators related to prognosis cannot be extracted; 2. Non-English articles; 3. Articles that repeat studies on the same patients.**

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 27 May 2022 and was last updated on 27 May 2022 (registration number INPLASY202250152).

INTRODUCTION

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Condition being studied: **The incidence of esophageal cancer in eastern countries**

increases yearly, and most patients with esophageal cancer are diagnosed at a non-early stage.

METHODS

Participant or population: Stage II-IV esophageal squamous cell carcinoma.

Intervention: High level of NLR at baseline.

Comparator: Low level of NLR at baseline.

Study designs to be included: RCT studies and retrospective studies.

Eligibility criteria: Inclusion criteria: 1. The study population included patients with squamous esophageal cancer; 2. There is a definite NLR cutoff value; 3. The number of people included in the study should not be too small; 4. RCT studies or retrospective studies. Exclusion criteria: 1. Survival outcome indicators related to prognosis cannot be extracted; 2. Non-English articles; 3. Articles that repeat studies on the same patients.

Information sources: Pubmed, Embase, The Cochrane Library,Web of science.

Main outcome(s): Overall survival and other related prognostic indicators.

Quality assessment / Risk of bias analysis: Retrospective study:Newcastle-Ottawa Scale (NOS); RCT study: Modified Jadad scale.

Strategy of data synthesis: Different analysis types are selected according to whether there is a high degree of heterogeneity in the collected effect size. The random effect model is used for high heterogeneity, and the fixed effect model is used for low heterogeneity.

Subgroup analysis: Subgroup studies were performed according to the number of patients included in the literature, treatment modality, NLR cutoff value, type of survival analysis, and clinical stage.

Sensitivity analysis: Observe the change in the combined effect size after removing any one effect size.

Country(ies) involved: China.

Keywords: esophageal cancer, meta-analysis, neutrophil-to-lymphocyte ratio, prognosis.

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