

INPLASY PROTOCOL

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None declared.

Neoadjuvant chemoradiotherapy for resectable gastric cancer: a meta-analysis

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Review question / Objective: To evaluate clinical curative effects and toxicity of neoadjuvant chemoradiotherapy for resectable gastric cancer.

Condition being studied: We searched PubMed, EMBase, Cochrane Library, Web of Science, Chinese National Knowledge Infrastructure (CNKI), Chinese Biological Medicine (CBM) Database, Wanfang Database and the VIP Database and at the same time, we also searched for related trials in the International Clinical Trial Registry Platform (ICTRP) and the Chinese Clinical Registry up to October 1, 2021. We used the following medical subject headings to search for the terms Stomach Neoplasms, Neoadjuvant chemoradiotherapy and neoadjuvant chemotherapy. Meta-analysis was conducted by RevMan5.3 software after data extraction and quality evaluation by the Cochrane Collaboration's tool for randomized controlled trials.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 29 March 2022 and was last updated on 29 March 2022 (registration number INPLASY202230164).

INTRODUCTION

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of Science, Chinese National Knowledge Infrastructure (CNKI), Chinese Biological Medicine (CBM) Database, Wanfang Database and the VIP Database and at the same time, we also searched for related trials in the International Clinical Trial Registry Platform (ICTRP) and the Chinese Clinical Registry up to October 1, 2021. We used the following medical subject

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METHODS

Search strategy: Two investigators independently searched PubMed, EMBASE, Cochrane Library, Web of Science, Chinese National Knowledge Infrastructure (CNKI), Chinese Biological Medicine (CBM) Database, Wanfang Database and the VIP Database and at the same time, we also searched for related trials in the International Clinical Trial Registry Platform (ICTRP) and the Chinese Clinical Registry up to October 1, 2021. We used the following medical subject headings to search for the terms Stomach Neoplasms, Neoadjuvant chemoradiotherapy and neoadjuvant chemotherapy. Two investigators filtered the searched articles according to the inclusion and exclusion criteria and if they had differences, the third researcher would determine whether the article would be included.

Participant or population: Patients diagnosed with gastric cancer by histopathological examination and cytological examination.

Intervention: neoadjuvant chemoradiotherapy.

Comparator: neoadjuvant chemoradiotherapy vs neoadjuvant chemotherapy for resectable gastric cancer.

Study designs to be included: Randomized Controlled Trials (RCTs).

Eligibility criteria: Patients diagnosed with gastric cancer by histopathological examination and cytological examination.

Information sources: PubMed, EMBASE, Cochrane Library, Web of Science, Chinese National Knowledge Infrastructure (CNKI),

Chinese Biological Medicine (CBM) Database, Wanfang Database and the VIP Database.

Main outcome(s): objective response rate (ORR) and survival rate.

Additional outcome(s): Incidence of adverse reactions mainly including nausea and vomiting, myelosuppression, anemia and digestive tract reactions, R0 resection rate and complete response rate of cases (pCR).

Quality assessment / Risk of bias analysis: We evaluated the quality of all meta-analyses through the Cochrane Collaboration's tool for assessing risk of bias. It was faultless that all of eligible studies adopted random numbers to decide the final treatment and all of them had completed data, no selective reports and other deviations.

Strategy of data synthesis: All meta-analyses were performed using the Cochrane RevMan version 5.3 and Stata (version 13). The results were reported as pooled odds ratios (ORs) with respective 95% confidence intervals (95% CIs). We used the Cochran's Q test and I² statistic to evaluate the heterogeneity of all studies. If the heterogeneity was significant (p<0.05), the random effect model was adopted; otherwise, the fixed effect model was used. We assessed the potential publication bias by funnel plots, Egger's test and Begg's test. All p values were two-sided, and p<0.05 was considered to manifest statistical significance.

Subgroup analysis: Temporarily no.

Sensitivity analysis: The sensitivity analyses were performed by excluding one study at a time to assess the influence of each study on overall results.

Language: English.

Country(ies) involved: China.

Keywords: Resectable gastric cancer, Neoadjuvant chemoradiotherapy, Meta-analysis.

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