# INPLASY PROTOCOL

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Support: None.

Review Stage at time of this submission: Data extraction.

Conflicts of interest: None declared.

## De Ritis ratio is a new biomarker for predicting the prognosis of patients with bladder cancer — a meta-analysis

Zhou, X<sup>1</sup>; Luo, GC<sup>2</sup>.

**Review question / Objective:** This meta-analysis aims to further evaluate the prognostic value of De Ritis ratio for bladder cancer and provide a higher level of medical basis for clinical practice.

Condition being studied: As a new prognostic marker of bladder cancer, De Ritis ratio has been studied in recent years, but its prognostic value is still uncertain. The latest meta-analysis has obvious limitations.

**Eligibility criteria:** We will search, with no time restrictions, the following databases for relevant English language literature: PubMed, the Cochrane Library and Embase. Included studies included patients with bladder cancer (as diagnosed by a clinician, or using any recognized diagnostic criteria) and De Ritis ratio.

**INPLASY registration number:** This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 07 June 2022 and was last updated on 07 June 2022 (registration number INPLASY202260024).

### INTRODUCTION

**Review question / Objective:** This metaanalysis aims to further evaluate the prognostic value of De Ritis ratio for bladder cancer and provide a higher level of medical basis for clinical practice.

**Condition being studied:** As a new prognostic marker of bladder cancer, De Ritis ratio has been studied in recent years,

but its prognostic value is still uncertain. The latest meta-analysis has obvious limitations.

#### **METHODS**

Participant or population: Patients with bladder cancer (as diagnosed by a clinician, or using any recognized diagnostic criteria).

Intervention: High De Ritis ratio.

Comparator: Low De Ritis ratio.

Study designs to be included: Retrospective study.

Eligibility criteria: We will search, with no time restrictions, the following databases for relevant English language literature: PubMed, the Cochrane Library and Embase. Included studies included patients with bladder cancer (as diagnosed by a clinician, or using any recognized diagnostic criteria) and De Ritis ratio.

Information sources: We will search, with no time restrictions, the following databases for relevant English language literature: PubMed, the Cochrane Library and Embase.

Main outcome(s): Overall survival (OS) and cancer special survival (CSS).

Additional outcome(s): Progression-free survival (PFS) and recurrence-free survival (RFS).

Quality assessment / Risk of bias analysis: Two reviewers will independently assesses the quality of the selected studies according to the Newcastle-Ottawa Scale(NOS). Items will be evaluate in three categories: selection, comparability and exposure.

**Strategy of data synthesis:** Hazard risk (HR) for both fixed and random effects models (weighting by inverse of variance) will be used. According to the Cochrane handbook, the l<sup>2</sup> will be considered nonimportant (60%). Results will be assessed using forest plots and presented as HRs for the main outcome and secondary outcomes by Review Manager 5.3. Sensitivity analysis with Stata software. Publication bias will be assessed by egger's test by Stata software.

Subgroup analysis: We will consider subgroups such as Study period, Country, therapy method, Sample size, tumor T stage, whether there is metastasis, invasiveness and cut off value of De Ritis ratio.

Sensitivity analysis: Import the data into Stata software for sensitivity analysis.

Country(ies) involved: China.

Keywords: 1. De Ritis ratio 2. Bladder cancer 3. Prognosis 4. Meta-analysis.

### **Contributions of each author:**

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