

# INPLASY

## Revealing the prognostic and clinicopathological significance of systemic immune-inflammation index in prostate cancer patients

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Gao, XD; Qi, WQ; Li, JX; Ding, PZ; Guo, DY; Shi, BK; Jiang, XW.

### Corresponding author:

gao xindong

1944834554@qq.com

### Author Affiliation:

Qilu Hospital of Shandong University.

### ADMINISTRATIVE INFORMATION

**Support** - 251677.

**Review Stage at time of this submission** - Completed but not published.

**Conflicts of interest** - None declared.

**INPLASY registration number:** INPLASY202440020

**Amendments** - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 04 April 2024 and was last updated on 04 April 2024.

### INTRODUCTION

**Review question / Objective** The purpose of this study is to investigate the prognostic and predictive role of circulating tumor DNA in people with muscle invasive bladder cancer.

**Condition being studied** Prostate cancer.

### METHODS

**Participant or population** Patients with muscle invasive bladder cancer.

**Intervention** Positive ctDNA state.

**Comparator** Negative ctDNA state.

**Study designs to be included** Prospective and retrospective cohort studies.

**Eligibility criteria** The inclusion criteria: (I) patients are diagnosed with MIBC; (II) hazard ratios (HRs), corresponding 95% confidence intervals (CIs) for ctDNA state and survival outcomes are reported; (III) the language of publication is English. The exclusion criteria: (I) non-conforming article types, such as case reports, reviews and conference abstracts; (II) no results of interest in the article.

**Information sources** PubMed, Embase and the Cochrane Library.

**Main outcome(s)** OS, PFS, RFS.

**Quality assessment / Risk of bias analysis** Newcastle-Ottawa Quality Assessment Scale (NOS).

**Strategy of data synthesis** 95% CI of HR to evaluate the association between ctDNA state and survival outcomes using Review Manager software

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(RevMan, version 5.4, CochraneCollaboration), Quantify heterogeneity levels using Cochran's Q-test and I<sup>2</sup>-square index. 0%-25%, 25%-50%, and 50%-75% respectively represent low, moderate, and considerable heterogeneity.

**Subgroup analysis** Divide into two subgroups based on sample acquisition time, before and after treatment.

**Sensitivity analysis** Sensitivity analysis is conducted by one by one elimination method to detect the stability of meta-analysis using STATA (version 17; StataCorp LLC, University of Texas Station, USA).

**Country(ies) involved** China.

**Keywords** muscle invasive bladder cancer; circulating tumor DNA; prognosis; systematic review; meta-analysis.

**Contributions of each author**

Author 1 - Gao xindong.

Email: 1944834554@qq.com

Author 2 - Wenqiang Qi.

Author 3 - Junxian Li.

Author 4 - Pengzhong Ding.

Author 5 - Dongyue Guo.

Author 6 - Benkang Shi.

Author 7 - Xuewen Jiang.