INPLASY PROTOCOL

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None declared.

Androgen deprivation therapy and radiotherapy in intermediate-risk prostate cancer: A systematic review and meta-analysis

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Review question / Objective: **To evaluate overall survival(OS) and biochemical recurrence-free survival (BCRFS) of androgen deprivation therapy and radiotherapy in intermediate-risk prostate cancer.**
Condition being studied: **Prostate cancer(PC) is the second most common cancer and the fifth leading cause of cancer death among men wordwide. Radiotherapy(RT) alone may not be effective for treating PC and RT combining wih androgen deprivation therapy(ADT) is often a requisite. For low-risk PC, RT alone has shown high clinical response but for intermediate and high-risk PC, ADT is necessary for clinical effects. Therefore, in this study, we compared the efficacy and safety of RT alone with RT+ADT in intermediate PC through meta analysis, so as to provide evidence-based evidence for the treatment of intermediate PC patients.**

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 23 August 2022 and was last updated on 23 August 2022 (registration number INPLASY202280095).

INTRODUCTION

Review question / Objective: **To evaluate overall survival(OS) and biochemical recurrence-free survival (BCRFS) of androgen deprivation therapy and radiotherapy in intermediate-risk prostate cancer.**

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necessary for clinical effects. Therefore, in this study, we compared the efficacy and safety of RT alone with RT+ADT in intermediate PC through meta analysis, so as to provide evidence-based evidence for the treatment of intermediate PC patients.

METHODS

Participant or population: Patients were confirmed as prostate cancer by histopathological or cytological examination and met the diagnostic criteria of intermediate-risk prostate cancer.

Intervention: Androgen deprivation therapy.

Comparator: Radiotherapy alone vs Radiotherapy + Androgen deprivation therapy.

Study designs to be included: Randomized controlled trials(Rcts) and retrospective studies.

Eligibility criteria: Clinical trials and retrospective studies directly comparing radiotherapy alone with radiotherapy + androgen deprivation therapy.All patients were confirmed as prostate cancer by histopathological or cytological examination and met the diagnostic criteria of intermediate-risk prostate cancer; and sufficient data could be extracted for analysis.

Information sources: PubMed, Embase, Conchrane library, Web of Science, Chinese National Knowledge Infrastructure (CNKI), Chinese Biological Medicine(CBM) Database, Wanfang Database and the VIP Database, the International Clinical Trial Registry Platform (ICTRP) and the Chinese Clinical Registry.

Main outcome(s): Overall survival(OS) and biochemical recurrence-free survival (BCRFS).

Quality assessment / Risk of bias analysis: The cochrane collaboration's tool and the Newcastle-Ottawa scale.

Strategy of data synthesis: All statistical analyses will be performed using the RevMan version 5.3 software and the Stata software(version 17).

Subgroup analysis: Subgroup analyses of randomized controlled trials(Rcts) and retrospective studies.

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

Country(ies) involved: China.

Keywords: Prostate cancer, Androgen deprivation therapy, Radiotherapy, Intermediate-risk prostate cancer, Systematic review, Meta-analysis.

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