International Platform of Registered Systematic Review and Meta-analysis Protocols

INPLASY

Low-dose trimethoprim-sulfamethoxazole for prophylaxis of pneumocystis jirovecii pneumonia: a systematic review and meta-analysis

INPLASY202440084
doi: 10.37766/inplasy2024.4.0084
Received: 21 April 2024
Published: 21 April 2024

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ADMINISTRATIVE INFORMATION

Support - Science and Technological Innovation Project of China Academy of Chinese Medical Sciences (CACMS) Innovation Fund (CI2021A02904).

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

Conflicts of interest - None declared.

INPLASY registration number: INPLASY202440084

Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 21 April 2024 and was last updated on 21 April 2024.

INTRODUCTION

Review question / Objective To investigate the efficacy and safety of a low-dose regimen of TMP-SMX against PJP prophylaxis in HIV-uninfected patients.

Condition being studied Condition being studied The research team comes from the Department of Critical Care Medicine of a tertiary hospital in China, and all the team members have perfect clinical experience in treatments for infection. Moreover, our team members have published more than 30 meta-analyses, which can guarantee the successful completion of the current research.

METHODS

Participant or population HIV-uninfected patients patients.

Intervention Low-dose TMP-SMX prophylasis.

Comparator Standard dose of TMP-SMX prophylasis.

Study designs to be included RCT, observational studies.

Eligibility criteria Studies were included if they reported the safety and efficacy of using TMP-SMX in PJP prophylaxis in HIV-uninfected patients.

Information sources Articles available only in abstract form or meeting reports were also excluded.

Main outcome(s) Overall discontinuation rates.

Quality assessment / Risk of bias analysis Cochrane Risk of Bias tool for RCTs and the Newcastle-Ottawa Quality Assessment Scale.

Strategy of data synthesis The data were pooled using the DerSimonian and Laird random-effects models for single-arm and controlled studies. For two-arm studies, the results from all relevant studies were combined to estimate the pooled odds ratio (ORs) and associated 95% confidence intervals (CIs) for dichotomous outcomes and estimate mean differences (MD) and 95% CIs for continuous outcomes as effective results.

Subgroup analysis (1) statistical analysis: fixed-effects mode or random-effects mode; (2) follow-up; (3) study design; (4) sample size; and (5) low-dose strategy.

Sensitivity analysis (1) AEs associated discontinuation rate; (2) patients with rheumatic diseases; (3) mixed patients; and (4) patients with or without renal dysfunction.

Country(ies) involved China.

Keywords pectin; critical illness; enteral nutrition; diarrhea; meta-analysis.

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