

INPLASY

Low-Dose Trimethoprim-Sulfamethoxazole Treatment for Pneumocystis Pneumonia: a systematic review and meta-analysis

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ADMINISTRATIVE INFORMATION

Support - None.

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

Conflicts of interest - None declared.

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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 evaluate the efficacy and safety of low-dose TMP-SMX regimens compared with the standard regimen in patients with PJP.

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 10 meta-analyses, which can guarantee the successful completion of the current research.

METHODS

Participant or population PJP patients.

Intervention Patients received low-dose doses of TMP-SMX.

Comparator Patients received standard-dose doses of TMP-SMX.

Study designs to be included RCT, observational studies.

Eligibility criteria Patients received different doses of TMP-SMX as defined by authors.

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

Main outcome(s) All-cause mortality.

Quality assessment / Risk of bias analysis

Newcastle-Ottawa scale

Strategy of data synthesis The results from all relevant studies were combined to estimate the pooled odds ratio (ORs) and associated 95% confidence intervals (CIs) for dichotomous outcomes. For the continuous outcomes, we estimated mean differences (MD) and 95% CIs as effective results.

Subgroup analysis (1) statistical analysis; (2) follow-up; (3) Diagnosis criteria; and (4) mortality prevalence.

Sensitivity analysis (a) adjunctive steroids use; (b) non-HIV infection; (c) sample size >50; (d) TMP-SMX as the only initial drug; (e) low-dose of TMP<10 mg/kg/d; and (f) low-dose of TMP<15 mg/kg/d.

Country(ies) involved China.

Keywords pneumocystis jirovecii pneumonia; trimethoprim-sulfamethoxazole; adverse event; mortality; meta-analysis; spectin; critical illness; enteral nutrition; diarrhea; meta-analysis.

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