INPLASY PROTOCOL

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Conflicts of interest:

None declared.

Efficacy and safety of baricitinib for the treatment of hospitalised adults with COVID-19: a systematic review and meta-analysis

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Review question / Objective: We sought to conduct a systematic review and meta-analysis to evaluate the efficacy and safety of baricitinib for the treatment of hospitalised adults with COVID-19.

Condition being studied: Death from any cause/ Duration of hospitalization/ Median time to recovery/ Infections and infestations/ MACEs/ Pulmonary embolism/ Deep vein thrombosis.

Information sources: We will search the references in the included trials and personal files. We will request advice from experts in the field. In addition, we will search associated articles from meetings, and contacted the authors of included trials, if need.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 30 January 2023 and was last updated on 30 January 2023 (registration number INPLASY202310086).

*Jing Sun, Shufang Wang and Xin Ma have contributed equally to this work.

INTRODUCTION

Review question / Objective: We sought to conduct a systematic review and metaanalysis to evaluate the efficacy and safety of baricitinib for the treatment of hospitalised adults with COVID-19.

Condition being studied: Death from any cause/ Duration of hospitalization/ Median time to recovery/ Infections and

infestations/ MACEs/ Pulmonary embolism/ Deep vein thrombosis.

METHODS

Participant or population: Patients of hospitalised adults with COVID-19.

Intervention: Baricitinib.

Comparator: Placebo.

Study designs to be included: The search strategy was RCTs or Prospective observational studies.

Eligibility criteria: (1) Patients of hospitalised adults with COVID-19. (2) Treatment with baricitinib or placebo. (3) Outcomes Indicators: Death from any cause/ Duration of hospitalization/ Median time to recovery/ Infections and infestations/ MACEs/ Pulmonary embolism/ Deep vein thrombosis, including one.

Information sources: We will search the references in the included trials and personal files. We will request advice from experts in the field. In addition, we will search associated articles from meetings, and contacted the authors of included trials, if need.

Main outcome(s): Death from any cause.

Quality assessment / Risk of bias analysis: We evaluated the methodological quality of the individual studies using the Cochrane risk of bias tool for RCTs.

Strategy of data synthesis: We will consider using the number of participants and deaths between different groups for analysis. Mortality may also be reported.

Subgroup analysis: Subgroup analysis was performed on general inpatients and critically ill patients, if appropriate.

Sensitivity analysis: We conducted sensitivity analyses to investigate the influence of a single study on the overall pooled estimate of each predefined outcome.

Country(ies) involved: China.

Keywords: Baricitinib, COVID-19, Efficacy, Safety.

Contributions of each author:

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