INPLASY PROTOCOL

To cite: Geng et al. The efficacy and safety of extended anticoagulation therapy with direct oral anticoagulant for patients with COVID-19: a systematic review and meta-analysis. Inplasy protocol 202310089. doi: 10.37766/inplasy2023.1.0089

Received: 31 January 2023

Published: 31 January 2023

Corresponding author:
Yintang Wang and Ping Zhang

wyta02494@btch.edu.cn
zhpdoc@126.com

Author Affiliation:
Department of Cardiology,Beijing Tsinghua Changgung Hospital, School of Clinical Medicine, Tsinghua University, Beijing, China.

Support: **None.**

Review Stage at time of this submission: **Preliminary searches.**

Conflicts of interest:
None declared.

The efficacy and safety of extended anticoagulation therapy with direct oral anticoagulant for patients with COVID-19: a systematic review and meta-analysis

Geng, Y[1]; Meng, C[2]; Gao, T[3]; Li, SY[4]; Bi, L[5]; Wang, YT[6]; Zhang, P[7].

Review question / Objective: **We sought to conduct a systematic review and meta-analysis to evaluate the efficacy and safety of extended anticoagulation therapy with direct oral anticoagulant for patients with COVID-19.**
Eligibility criteria: **(1) Patients with COVID-19. (2) The extended anticoagulation therapy with direct oral anticoagulant or not. (3) outcomes Indicators: All cause death, symptomatic and fatal VTE, symptomatic DVT, pulmonary embolism, major bleeding, clinically relevant non-major, any bleeding, 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.**

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 31 January 2023 and was last updated on 31 January 2023 (registration number INPLASY202310089).

*Yu Geng, Chang Meng and Tong Gao have contributed equally to this work

INTRODUCTION

Review question / Objective: **We sought to conduct a systematic review and meta-analysis to evaluate the efficacy and safety of extended anticoagulation therapy with direct oral anticoagulant for patients with COVID-19.**

Condition being studied: **All cause death, symptomatic and fatal VTE, symptomatic**

DVT, pulmonary embolism, major bleeding, clinically relevant non-major, any bleeding.

METHODS

Participant or population: Patients with COVID-19.

Intervention: The extended anticoagulation therapy with direct oral anticoagulant.

Comparator: Placebo or none.

Study designs to be included: The search strategy was RCTs.

Eligibility criteria: (1) Patients with COVID-19. (2) The extended anticoagulation therapy with direct oral anticoagulant or not. (3) outcomes Indicators: All cause death, symptomatic and fatal VTE, symptomatic DVT, pulmonary embolism, major bleeding, clinically relevant non-major, any bleeding, 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): A compound endpoints of safe outcomes.

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: (1) Hospitalization for COVID-19 or outpatients with COVID-19; (2) Lower doses of DOAC or standard dose of DOAC.

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: Direct oral anticoagulant; Anticoagulation; COVID-19.

Contributions of each author:
Author 1 - Yu Geng.
Author 2 - Chang Meng.
Author 3 - Tong Gao.
Author 4 - Siyuan Li.
Author 5 - Lei Bi.
Author 6 - Yintang Wang.
Author 7 - Ping Zhang.