INPLASY PROTOCOL

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Conflicts of interest:

None declared.

Finerenone reduces risk of cardiovascular outcomes in patients with chronic kidney disease and type 2 diabetes: A protocol for systematic review and meta-analysis

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Review question / Objective: Chronic kidney disease and type 2 diabetes are independently associated with cardiovascular outcomes, a leading cause of morbidity and mortality. Does finerenone reduce the risk of cardiovascular events while being very effective in the treatment of diabetic nephropathy? P:Patients with chronic kidney disease and type 2 diabetes; I:Finerenone; C:Placebo; O:Impact or risk factors or associated factors; S:RCT or cohort study.

Condition being studied: Chronic kidney disease and type 2 diabetes are independently associated with cardiovascular outcomes, a leading cause of morbidity and mortality.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 12 March 2022 and was last updated on 12 March 2022 (registration number INPLASY202230052).

INTRODUCTION

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of diabetic nephropathy? P:Patients with chronic kidney disease and type 2 diabetes; I:Finerenone; C:Placebo; O:Impact or risk factors or associated factors; S:RCT or cohort study.

Condition being studied: Chronic kidney disease and type 2 diabetes are independently associated with

cardiovascular outcomes, a leading cause of morbidity and mortality.

METHODS

Participant or population: Chronic kidney disease and type 2 diabetes.

Intervention: Finerenone.

Comparator: Placebo.

Study designs to be included: RCT or cohort study.

Eligibility criteria: Inclusion criteria1. The type of study must be a randomized controlled trial or cohort study2. Participants must be older than 18 years of ageExclusion criteria1. Very small sample size2. other relevant treatment prior to the intervention.

Information sources: PubMed, Embase database, Cochrane Library, Web of Science and China national knowledge infrastructure(CNKI).

Main outcome(s): Evaluating the proportion of cardiovascular outcomes in patients with chronic kidney disease and type 2 diabetes treated with finerenone.

Data management: EndNote.

Quality assessment / Risk of bias analysis: The Newcastle-Ottawa Scale (NOS) was used to verify the quality of the evidence.

Strategy of data synthesis: The multivariate adjusted pooled effect estimates were calculated using random-effects models or fixed-effects models depending on heterogeneity among studies.

Subgroup analysis: Important covariates such as race, country, economic circumstances or study design will be used as a classification basis for subgroup analysis. Subgroup analysis is intended to test heterogeneity and factors that may affect results.

Sensitivity analysis: After deleting any one of them, the combined results of the remaining papers were not significantly different from those without deletion, which means that the sensitivity analysis was passed.

Country(ies) involved: China.

Keywords: finerenone, chronic kidney disease, type 2 diabetes.

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