

# INPLASY PROTOCOL

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**Support:** None.

**Review Stage at time of this submission:** Piloting of the study selection process.

## Conflicts of interest:

None declared.

## Efficacy and safety of colchicine in patients with coronary heart disease : a meta-Analysis of randomized controlled clinical trials

Ma, ZJ<sup>1</sup>; Chen, J<sup>2</sup>; Jin, KQ<sup>3</sup>; Chen, X<sup>4</sup>.

**Review question / Objective:** The aim of this study is to investigate the efficacy and safety of colchicine in patients with coronary heart disease, and screen the proper colchicine treatment time.

**Condition being studied:** Colchicine has been considered as a treatment option for secondary prevention in patients with CAD, but its safety and clinical benefit are still controversial. The purpose of this study was to investigate the clinical benefits of colchicine and focus on specific subgroups.

**Information sources:** Searchers were conducted in the following electronic databases: PubMed, Google Scholar, EMBASE, and the Cochrane Database of Systematic Reviews from the earliest date to April 2022. Studies in English were eligible. A complex search strategy was developed for each database.

**INPLASY registration number:** This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 13 May 2022 and was last updated on 13 May 2022 (registration number INPLASY202250086).

## INTRODUCTION

**Review question / Objective:** The aim of this study is to investigate the efficacy and safety of colchicine in patients with coronary heart disease, and screen the proper colchicine treatment time.

**Condition being studied:** Colchicine has been considered as a treatment option for secondary prevention in patients with CAD, but its safety and clinical benefit are still controversial. The purpose of this study was to investigate the clinical benefits of colchicine and focus on specific subgroups.

## METHODS

**Search strategy:** Searchers were conducted in the following electronic databases: PubMed, Google Scholar, EMBASE, and the Cochrane Database of Systematic Reviews from the earliest date to April 2022. Studies in English were eligible. A complex search strategy was developed for each database.

**Participant or population:** Patients with coronary heart disease.

**Intervention:** Colchicine.

**Comparator:** All comparators are eligible for this overview.

**Study designs to be included:** Systematic reviews and meta-analysis of randomized controlled trials.

**Eligibility criteria:** Adult subjects over 18 years old with or diagnosed with coronary heart disease, regardless of PCI.

**Information sources:** Searchers were conducted in the following electronic databases: PubMed, Google Scholar, EMBASE, and the Cochrane Database of Systematic Reviews from the earliest date to April 2022. Studies in English were eligible. A complex search strategy was developed for each database.

**Main outcome(s):** The efficacy endpoints were cardiovascular(CV) mortality, all-cause mortality, myocardial infarction, stroke, target vessel revascularization, Gastrointestinal side effects, diarrhea. Measures of effect Relative risk(RR) of efficacy and safety endpoints.

**Additional outcome(s):** None.

**Quality assessment / Risk of bias analysis:** The methodological quality of systematic reviews will be independently assessed by two authors using the AMSTAR tool. Discrepancy will be resolved by a third author.

**Strategy of data synthesis:** A descriptive data synthesis will be performed. GRADE will be used to assess the evidence level of results for each meta-analysis.

**Subgroup analysis:** Treatment time: Short term (less than 1 month), moderate term (1 month to 1 year), long term (more than 1 year).

**Sensitivity analysis:** Sensitivity analysis was performed using R software, the change of effect quantity after deleting one article reflects the sensitivity of the article.

**Language:** English.

**Country(ies) involved:** China.

**Keywords:** Coronary atherosclerotic heart disease; Colchicine; Randomized Controlled Trial.

### Contributions of each author:

Author 1 - ZiJun Ma - Independently searched PubMed, Google Scholar, EMBASE, and the Cochrane Library extract data. Conceptualized the study, performed screening, data extraction, and data analysis by R software.

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Author 2 - Jun Chen - Independently searched PubMed, Google Scholar, EMBASE, and the Cochrane Library extract data. Conceptualized the study, performed screening, data extraction, and data analysis by R software.

Author 3 - KaiQin Jin - Original draft preparation, reviewing, and editing.

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Author 4 - Xin Chen - Supervise and fund the work.

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