#### International Platform of Registered Systematic Review and Meta-analysis Protocols

# INPLASY

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## Association between cardiovascular disease and hip fracture: 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 23 November 2023 and was last updated on 23 November 2023.

#### **INTRODUCTION**

Review question / Objective The aim of this study was to comprehensively analyze the bidirectional association between cardiovascular disease (CVD) and hip fracture (HF).

**Condition being studied** Association between cardiovascular disease and hip fracture.

#### **METHODS**

**Participant or population** Cardiovascular disease and hip fracture.

Intervention None.

Comparator Odds ratio.

Study designs to be included case control and cohort.

**Eligibility criteria** (1) study was original; (2) the study design was a case-control, cohort, or nested case-control study; (3) the study was on the association between CVD and HF; (4) the study individual was human; and (5) the results reported relative risk (RR), odds ratio (OR), or hazard ratio (HR), or provided raw data that could be used to calculate OR.

**Information sources** We searched PubMed, EMBASE, Web of Sciences, Cochrane Library, ScienceDirect and China National Knowledge Infrastructure for relevant studies.

#### Main outcome(s) Odds ratio.

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**Quality assessment / Risk of bias analysis** The Newcastle-Ottawa scale was used to evaluate the risk of bias.

**Strategy of data synthesis** We conducted random effects model for meta-analysis and subgroup analysis of different ethnic groups.

**Subgroup analysis** Subgroup analysis of different ethnic groups was conducted.

**Sensitivity analysis** Sensitivity analysis with leave one out was carried out.

**Country(ies) involved** China (Fudan university school of public health).

**Keywords** CVD, hip fracture, meta-analysis, systematic review, risk.

#### **Contributions of each author**

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