

INPLASY PROTOCOL

To cite: Du et al. After transcatheter aortic valve replacement in patients of different ages Prognosis of new left bundle branch block: a systematic review and meta-analysis. Inplasy protocol 2022120091. doi: 10.37766/inplasy2022.12.0091

Received: 22 December 2022

Published: 22 December 2022

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Support: No.

Review Stage at time of this submission: Data analysis.

Conflicts of interest:

None declared.

After transcatheter aortic valve replacement in patients of different ages Prognosis of new left bundle branch block: a systematic review and meta-analysis

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Review question / Objective: The number of transcatheter aortic valve replacement is increasing year by year. The incidence of new left bundle branch block did not decrease. The purpose of this systematic review is to evaluate the prognosis of patients with new persistent left bundle branch block after transcatheter aortic valve replacement in different ages. **P:** Patients after transcatheter aortic valve replacement. **I:** Patients with left bundle branch block. **C:** Patients without left bundle branch block. **O:** Prognosis and outcomes. **S:** Cohort study.

Condition being studied: The number of transcatheter aortic valve replacement is increasing year by year. The incidence of new left bundle branch block did not decrease. The purpose of this systematic review is to evaluate the prognosis of patients with new persistent left bundle branch block after transcatheter aortic valve replacement in different ages.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 22 December 2022 and was last updated on 22 December 2022 (registration number INPLASY2022120091).

INTRODUCTION

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new left bundle branch block did not decrease. The purpose of this systematic review is to evaluate the prognosis of patients with new persistent left bundle branch block after transcatheter aortic valve replacement in different ages.

METHODS

Participant or population: Patients after transcatheter aortic valve replacement.

Intervention: Patients with left bundle branch block.

Comparator: Patients without left bundle branch block.

Study designs to be included: Cohort study.

Eligibility criteria: Inclusion criteria:1. The type of study is cohort study2. Patients after transcatheter aortic valve replacement3. Postoperative persistent left bundle branch block group4. There are outcome indicators consistent with the research purposeExclusion criteria:1. Patients with pacemaker or persistent left bundle branch block before transcatheter aortic valve surgery were included2. Unable to get full-text.

Information sources: Pubmed, embase, Cochrane, web of science.

Main outcome(s): All-cause mortality.

Additional outcome(s): Hospitalization rate of heart failure; Cardiovascular mortality; Pacemaker iEmplantation rate.

Data management: EndNote.

Quality assessment / Risk of bias analysis: Cochrane tool.

Strategy of data synthesis: Heterogeneity exists. Heterogeneity analysis is carried out by means of Rabe chart and star chart, and then sensitivity analysis is carried out to find out the source of heterogeneity. After the heterogeneity is eliminated, fixed effects are used to consolidate the data; If the source of heterogeneity cannot be

found, the data shall be combined with random effects.

Subgroup analysis: Sub ethnic studies were conducted according to the age of patients.

Sensitivity analysis: After deleting any one of the articles, the difference between the combined results of the remaining articles and those not deleted have little differences, which means that the sensitivity analysis has been passed.

Country(ies) involved: China.

Keywords: Transcatheter aortic valve replacement; new persistent left bundle branch block; Prognostic outcome.

Contributions of each author:

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