

# INPLASY PROTOCOL

To cite: Song et al. Diagnostic accuracy of left atrial/left atrial appendage thrombus in patients with atrial fibrillation: a systematic review and network meta-analysis. Inplasy protocol 2022120041. doi: 10.37766/inplasy2022.12.0041

Received: 10 December 2022

Published: 10 December 2022

**Corresponding author:**  
Ruirui Song

songruirui2019@163.com

**Author Affiliation:**  
The Second Affiliated Hospital of Shandong University of Traditional Chinese Medicine.

**Support:** National Natural Science Foundation of China.

**Review Stage at time of this submission:** Completed but not published.

**Conflicts of interest:**  
None declared.

## Diagnostic accuracy of left atrial/left atrial appendage thrombus in patients with atrial fibrillation: a systematic review and network meta-analysis

Song, RR<sup>1</sup>; Liu, F<sup>2</sup>; Shi, XJ<sup>3</sup>; Gao, HM<sup>4</sup>; Chen, J<sup>5</sup>; Guo, XF<sup>6</sup>; Huang, J<sup>7</sup>.

**Review question / Objective:** (P) Population: patients with AF and LA/LAA thrombosis; (I) Intervention: CMR, CCT, TEE, TTE and other diagnostic methods; (C) Control: All patients received TEE examination at the same time; (O) Outcome: LAA/LA thrombosis; (S) Study design: observational test.  
**Condition being studied:** TEE is the currently recommended gold standard for diagnosis of left atrial/left atrial appendage (LA/LAA) thrombosis [4-5]. However, because it is a semi-invasive examination, there are certain risks, and some patients may not tolerate the examination due to esophageal stenosis, esophageal ulcer, anesthetic allergy, high blood pressure, so it is necessary to find a replacement examination for TEE.

**INPLASY registration number:** This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 10 December 2022 and was last updated on 10 December 2022 (registration number INPLASY2022120041).

### INTRODUCTION

**Review question / Objective:** (P) Population: patients with AF and LA/LAA thrombosis; (I) Intervention: CMR, CCT, TEE, TTE and other diagnostic methods;

(C) Control: All patients received TEE examination at the same time; (O) Outcome: LAA/LA thrombosis; (S) Study design: observational test.

**Condition being studied:** TEE is the currently recommended gold standard for

---

diagnosis of left atrial/left atrial appendage (LA/LAA) thrombosis [4-5], However, because it is a semi invasive examination, there are certain risks, and some patients may not tolerate the examination due to esophageal stenosis, esophageal ulcer, anesthetic allergy, high blood pressure, so it is necessary to find a replacement examination for TEE.

## METHODS

**Participant or population:** Patients with AF and LA/LAA thrombos.

**Intervention:** CMR、CCT、TEE、TTE.

**Comparator:** CMR、CCT、TEE、TTE.

**Study designs to be included:** Observational test.

**Eligibility criteria:** Left atrial appendage/left atrial thrombus diagnosed as atrial fibrillation.

**Information sources:** Articles published in Pubmed, EMBASE, Cochrane Central register of Controlled Trials and Web of Science databases have been comprehensively and systematically searched.

**Main outcome(s):** Evaluate the effectiveness of different diagnostic methods and look for alternatives to TEE.

**Quality assessment / Risk of bias analysis:** The Diagnostic Accuracy research Quality Assessment Tool (QUADAS-2).

**Strategy of data synthesis:** Use Stata15.1 to present and describe network diagrams of different diagnostic methods. In the generated network diagram, each node represents a different diagnosis method, and the line connecting nodes represents a direct head to head comparison between different diagnosis methods. The size of each node and the width of the connecting line are proportional to the number of studies . To help explain the diagnostic performance, The surface under the

cumulative ranking curve (SUCRA) values is used to calculate. The higher the SUCRA value, the higher the diagnostic performance rating.

**Subgroup analysis:** No subgroup analysis.

**Sensitivity analysis:** Stata 15.1 is used for sensitivity analysis to reflect the name perception of the article by deleting the change of post effect response of one of the articles

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

**Keywords:** Atrial fibrillation ; LA/LAA thrombus; Diagnosis; CMR; CCT; TEE; TTE.

### Contributions of each author:

Author 1 - Ruirui Song.

Email: songruirui2019@163.com

Author 2 - Fang Liu.

Author 3 - Xiaojing Shi.

Author 4 - Hongmei Gao.

Author 5 - Jun Chen.

Author 6 - Xuefeng Guo.

Author 7 - Jian Huang.