SUPPLEMENTARY MATERIAL

APPENDIX A

Section and topic	Item No	Checklist item	
ADMINISTRATIVE INFORMATION			
Title:			
Identification	1a	Identify the report as a protocol of a systematic review	Performed
Update	1b	If the protocol is for an update of a previous systematic review, identify as such	
Registration	2	If registered, provide the name of the registry (such as PROSPERO) and registration number	Performed
Authors:			
Contact	3a	Provide name, institutional affiliation, e-mail address of all protocol authors; provide physical mailing address of corresponding author	Performed
Contributions	3b	Describe contributions of protocol authors and identify the guarantor of the review	
Amendments	4	If the protocol represents an amendment of a previously completed or published protocol, identify as such and list changes; otherwise, state plan for documenting important protocol amendments	Performed
Support:			
Sources	5a	Indicate sources of financial or other support for the review	Performed
Sponsor	5b	Provide name for the review funder and/or sponsor	
Role of sponsor or funder	5c	Describe roles of funder(s), sponsor(s), and/or institution(s), if any, in developing the protocol	
INTRODUCTION			
Rationale	6	Describe the rationale for the review in the context of what is already known	Performed
Objectives	7	Provide an explicit statement of the question(s) the review will address with reference to participants, interventions, comparators, and outcomes (PICO)	Performed
METHODS			

Eligibility criteria	8	Specify the study characteristics (such as PICO, study design, setting, time frame) and report characteristics (such as years considered, language, publication status) to be used as criteria for eligibility for the review	Performed
Information sources	9	Describe all intended information sources (such as electronic databases, contact with study authors, trial registers or other grey literature sources) with planned dates of coverage	Performed
Search strategy	10	Present draft of search strategy to be used for at least one electronic database, including planned limits, such that it could be repeated	Performed
Study records:			
Data management	11a	Describe the mechanism(s) that will be used to manage records and data throughout the review	Performed
Selection process	11b	State the process that will be used for selecting studies (such as two independent reviewers) through each phase of the review (that is, screening, eligibility and inclusion in meta-analysis)	
Data collection process	11c	Describe planned method of extracting data from reports (such as piloting forms, done independently, in duplicate), any processes for obtaining and confirming data from investigators	
Data items	12	List and define all variables for which data will be sought (such as PICO items, funding sources), any pre-planned data assumptions and simplifications	
Outcomes and prioritization	13	List and define all outcomes for which data will be sought, including prioritization of main and additional outcomes, with rationale	Performed
Risk of bias in individual studies	14	Describe anticipated methods for assessing risk of bias of individual studies, including whether this will be done at the outcome or study level, or both; state how this information will be used in data synthesis	Performed
Data synthesis	15a	Describe criteria under which study data will be quantitatively synthesized	Performed
	15b	If data are appropriate for quantitative synthesis, describe planned summary measures, methods of handling data and methods of combining data from studies, including any planned exploration of consistency (such as I^2, Kendall's τ)	

	15c	Describe any proposed additional analyses (such as sensitivity or subgroup analyses, meta-regression)	
	15d	If quantitative synthesis is not appropriate, describe the type of summary planned	
Meta-bias(es)	16	Specify any planned assessment of meta-bias(es) (such as publication bias across studies, selective reporting within studies)	Performed
Confidence in cumulative evidence	17	Describe how the strength of the body of evidence will be assessed (such as GRADE)	Performed

Shamseer L, Moher D, Clarke M, Ghersi D, Liberati A, Petticrew M, et al. Preferred reporting items for systematic review and meta-analysis protocols (PRISMA-P) 2015: elaboration and explanation. BMJ. 2015 Jan 2;349(jan02 1):g7647–g7647

APPENDIX B

Table 1 EMBASE search strategy

1. (left ventricular assist device or LVAD*).ti,ab,kf.
2. (Heartmate or Heartware or HVAD).ti,ab,kf.
3. exp left ventricular assist device/
4. 1 or 2 or 3
5. (stroke or cerebrovascular accident or cva or thrombo* or cerebral thrombosis or thrombosis).ti,ab,kf.
6. exp stroke/
7. limit 4 to yr="2016-2023"
8. 5 or 6
9. anticoagulant agent/ or fondaparinux/ or edoxaban/ or coumarin/ or dabigatran/ or rivaroxaban/ or low molecular weight heparin/ or hirudin/ or enoxaparin/ or heparin/ or phosphodiesterase type 5 inhibitors/ or viagra/ or sildenafil/ or tadalafil/ or warfarin/ or ximelagatran/ or acetylsalicylic acid/
10. exp anticoagulant agent/
11. exp coumarin/
12. (anticoagulation or anti-coagulation or anticoagulant* or antithrombotic or phytomenadione or doac or direct oral anticoagulants or fondaparinux or edoxaban or coumarin or dabigatran or apixaban or rivaroxaban or low molecular weight heparin or hirudin or enoxaparin or heparin or phosphodiesterase type 5 inhibitors or viagra or warfarin or ximelagatran or acetylsalicylic acid).ti,ab,tw,kf.
13. (vitamin adj3 antagonist*).mp.
14. 9 or 10 or 11 or 12 or 13
15. 7 and 8 and 14

Table 2 Medline search strategy

1. (left ventricular assist device or LVAD*).ti,ab,kf.
2. (Heartmate or Heartware or HVAD).ti,ab,kf.
3. Heart-Assist Devices/
4. 1 or 2 or 3
5. limit 4 to yr="2016-2023"
6. (stroke or cerebrovascular accident or cva or thrombo* or cerebral thrombosis or thrombosis).ti,ab,kf.
7. thrombosis/
8. thromboembolism/
9. exp stroke/
10. 6 or 7 or 8 or 9
11. coumarins/
12. exp anticoagulants/
13. exp heparin/
14. exp coumarins/
15. (anticoagulation or anti-coagulation or anticoagulant* or antithrombotic or phytomenadione or doac or direct oral anticoagulants or fondaparinux or edoxaban or coumarin or dabigatran or apixaban or rivaroxaban or low molecular weight heparin or hirudin or enoxaparin or heparin or phosphodiesterase type 5 inhibitors or viagra or warfarin or ximelagatran or acetylsalicylic acid).ti,ab,tw,kf.
16. aspirin/
17. (vitamin adj3 antagonist*).mp.
18. 11 or 12 or 13 or 14 or 15 or 16 or 17
19. 5 and 10 and 18