Supplementary Table SI. Preferred reporting items for systematic reviews and meta-analysis (PRISMA) checklist.

Section and Topic	Item #	Checklist item
TITLE		
Title	1	Identify the report as a systematic review.
ABSTRACT		
Abstract	2	See the PRISMA 2020 for Abstracts checklist.
INTRODUCTION		
Rationale	3	Describe the rationale for the review in the context of existing knowledge.
Objectives	4	Provide an explicit statement of the objective(s) or question(s) the review addresses.
METHODS		
Eligibility criteria	5	Specify the inclusion and exclusion criteria for the review and how studies were grouped for the syntheses.
Information sources	6	Describe all information sources in the search and date last searched.
Search strategy	7	Present full electronic search strategy for at least one database, including any limits used, such that it could be repeated.
Selection process	8	State the process for selecting studies.
Data collection process	9	Specify the methods used to collect data from reports, including how many reviewers collected data from each report, whether they worked independently, any processes for obtaining or confirming data from study investigators, and if applicable, details of automation tools used in the process.
Data items	10	List and define all outcomes for which data were sought. Specify whether all results that were compatible with each outcome domain in each study were sought (e.g. for all measures, time points, analyses), and if not, the methods used to decide which results to collect.
Study risk of bias assessment	11	Specify the methods used to assess risk of bias in the included studies, including details of the tool(s) used, how many reviewers assessed each study and whether they worked independently, and if applicable, details of automation tools used in the process.
Effect measures	12	Specify for each outcome the effect measure(s) (e.g. risk ratio, mean difference) used in the synthesis or presentation of results.
Synthesis methods	13a	Describe the processes used to decide which studies were eligible for each synthesis (e.g. tabulating the study intervention characteristics and comparing against the planned groups for each synthesis (item #5)).
	13b	Describe any methods used to tabulate or visually display results of individual studies and syntheses.
	13c	Describe any methods used to synthesize results and provide a rationale for the choice(s). If meta-analysis was performed, describe the model(s), method(s) to identify the presence and extent of statistical heterogeneity, and software package(s) used.
	13d	Describe any methods used to explore possible causes of heterogeneity among study results (e.g. subgroup analysis, meta-regression).
Risk of bias across studies	14	Specify any assessment of risk of bias that may affect the cumulative evidence.
Certainty assessment	15	Describe any methods used to assess certainty (or confidence) in the body of evidence for an outcome.

Section and Topic	Item #	Checklist item
RESULTS		
Study selection	16a	Describe the results of the search and selection process, from the number of records identified in the search to the number of studies included in the review, ideally using a flow diagram.
	16b	Cite studies that might appear to meet the inclusion criteria, but which were excluded, and explain why they were excluded.
Study characteristics	17	Cite each included study and present its characteristics.
Risk of bias in studies	18	Present assessments of risk of bias for each included study.
Results of individual studies	19	For all outcomes, present, for each study: (a) summary statistics for each group (where appropriate) and (b) an effect estimate and its precision (e.g. confidence/credible interval), ideally using structured tables or plots.
Results of syntheses	20a	For each synthesis, briefly summarise the characteristics and risk of bias among contributing studies.
	20b	Present results of all statistical syntheses conducted. If meta-analysis was done, present for each the summary estimate and its precision (e.g. confidence/credible interval) and measures of statistical heterogeneity. If comparing groups, describe the direction of the effect.
Risk of bias across studies	21	Present results of any assessment of risk of bias across studies.
Certainty of evidence	22	Present assessments of certainty (or confidence) in the body of evidence for each outcome assessed.
DISCUSSION		
Discussion	23a	Provide a general interpretation of the results in the context of other evidence.
	23b	Discuss any limitations of the evidence included in the review.
	23c	Discuss any limitations of the review processes used.
	23d	Discuss implications of the results for practice, policy, and future research.
OTHER INFORMATION		
Registration	24a	Provide registration information for the review, including register name and registration number, or state that the review was not registered.
	24b	Describe and explain any amendments to information provided at registration or in the protocol.
Support	25	Describe sources of financial or non-financial support for the review, and the role of the funders or sponsors in the review.
Competing interests	26	Declare any competing interests of review authors.
Availability of data, code and other materials	27	Report which of the following are publicly available and where they can be found: template data collection forms; data extracted from included studies; data used for all analyses; analytic code; any other materials used in the review.

From: Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ 2021;372:n71. doi: 10.1136/bmj.n71

Supplementary Table SII. Quality assessment sheet.

Author	Risk of bias								Applicability concerns		
	Patient selection		Index test	Reference standard	Flow and timing				Patient selection	Index test	Reference standard
	Were subject population of interest and demographic data described?	Were inclusion and exclusion criteria clearly described?	Was the tested method for cardiac output measurements described clearly?	Is the reference method for cardiac output monitoring likely to correctly measure cardiac output for the newborn population?	Were number of patients enrolled and who dropped out clearly described in the result?	Was the tested method and reference method for cardiac output monitoring measured simultaneously?	Were the method of acquiring paired measurements well described?	In case of repeated measurements of cardiac output in patients, did they use statistical analysis for agreement between methods of measurement with multiple observations per individual?	Is there concern that the included patients do not match the review question?	Are There Concerns That the Tested Method for Cardiac Output Monitoring, Its Conduct, or Its Interpretation Differ From the Review Question?	Are There Concerns That the Target Condition as Defined by the Reference Method for Cardiac Output Monitoring Does Not Match the Question?
	Yes/No/Unclear								Low/High/Unclear		

Rules for producing an overall risk of bias rating for each domain: 1. If all signalling questions within the domain are answered 'yes' then the risk of bias for this domain is rated 'low'; 2. If at least one signalling question within the domain is answered 'no' then the risk of bias for this domain is rated 'high'; 3. If at least one signalling question within the domain is answered 'unclear' while the remaining signalling questions are answered 'yes' then the risk of bias for this domain is rated 'unclear'.

Supplementary Table SIII. Results of quality assessment of included studies.

Author	Risk of bias				Applicability concerns		
	Patient selection	Index test	Reference standard	Flow and timing	Patient selection	Index test	Reference standard
Pliauckiene et al	Low	Low	Low	Low	Low	Low	Low
Fraga et al	Low	Low	Low	Low	Low	Low	Low
Zheng et al	Low	Low	Low	Low	Low	Low	Low
Patel et al	Low	Low	Low	Low	Low	Low	Low