

PRISMA 2020 Checklist

Review: Multimodal Digital Health Interventions vs. Standard Perioperative Management in Lung Cancer Surgery

Date: 2026-06-11

Section/Topic	#	Checklist Item	Reported on Page
TITLE	1	Identify the report as a systematic review, meta-analysis, and evidence gap map	1
ABSTRACT	2	See PRISMA 2020 for Abstracts checklist	2
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of existing knowledge	3–5
Objectives	4	Provide an explicit statement of the objective(s) or question(s) the review addresses	5
METHODS			
Eligibility criteria	5	Specify the inclusion and exclusion criteria for the review and how studies were grouped for the syntheses	5–6
Information sources	6	Specify all databases, registers, websites, organisations, reference lists and other sources searched or consulted to identify studies. Specify the date when each source was last searched or consulted	6
Search strategy	7	Present the full search strategies for all databases, registers and websites, including any filters and limits used	S2
Selection process	8	Specify the methods used to decide whether a study met the inclusion criteria of the review, including how many reviewers screened each record and each report retrieved, whether they worked independently, and if applicable, details of automation tools used in the process	6–7

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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	7
Data items	10a	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, and if not, the methods used to decide which results to collect	5–6
	10b	List and define all other variables for which data were sought. Describe any assumptions made about any missing or unclear information	7
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	7
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	7–8
Synthesis methods	13a	Describe the processes used to decide which studies were eligible for each synthesis	7
	13b	Describe any methods required to prepare the data for presentation or synthesis, such as handling of missing summary statistics, or data conversions	7

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	13c	Describe any methods used to tabulate or visually display results of individual studies and syntheses	7–8
	13d	Describe any methods used to synthesise results and provide a rationale for the choice(s)	7–8
	13e	Describe any methods used to explore possible causes of heterogeneity among study results (e.g. subgroup analysis, meta-regression)	8
	13f	Describe any sensitivity analyses conducted to assess robustness of the synthesised results	8
Reporting bias assessment	14	Describe any methods used to assess risk of bias due to missing results in a synthesis (arising from reporting biases)	8
Certainty assessment	15	Describe any methods used to assess certainty (or confidence) in the body of evidence for an outcome	8–9
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	9 + Fig 1
	16b	Cite studies that might appear to meet the inclusion criteria, but which were excluded, and explain why they were excluded	9
Study characteristics	17	Cite each included study and present its characteristics	9–10 + Table 1
Risk of bias in studies	18	Present assessments of risk of bias for each included study	10
Results of individual studies	19	For all outcomes, present, for each study: (a) summary statistics for each group and (b) an effect estimate and its precision, ideally using structured tables or plots	Fig 3–4
Results of syntheses	20a	For each synthesis, briefly summarise the characteristics and risk of bias among contributing studies	10–12

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	20b	Present results of all statistical syntheses conducted. If meta-analysis was done, present for each the summary estimate and its precision and measures of statistical heterogeneity	10–12
	20c	Present results of all investigations of possible causes of heterogeneity among study results	11–12
	20d	Present results of all sensitivity analyses conducted to assess the robustness of the synthesised results	12
Reporting biases	21	Present assessments of risk of bias due to missing results (arising from reporting biases) for each synthesis assessed	12–13
Certainty of evidence	22	Present assessments of certainty (or confidence) in the body of evidence for each outcome assessed	12–13 + S5
DISCUSSION			
Discussion	23a	Provide a general interpretation of the results in the context of other evidence	13–15
	23b	Discuss any limitations of the evidence included in the review	16
	23c	Discuss any limitations of the review processes used	16
	23d	Discuss implications of the results for practice, policy, and future research	15–17
OTHER INFORMATION			
Registration and protocol	24a	Provide registration information for the review, including register name and registration number, or state that the review was not registered	1
	24b	Indicate where the review protocol can be accessed, or state that a protocol was not prepared	6
	24c	Describe and explain any amendments to information provided at registration or in the protocol	6

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Support	25	Describe sources of financial or non-financial support for the review, and the role of the funders or sponsors in the review	17
Competing interests	26	Declare any competing interests of review authors	17
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	17

Note: Page numbers reference the manuscript PDF; final numbering to be adjusted after all tables and figures are embedded.