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Supplementary 1. Preferred Reporting Items for Systematic Reviews and Meta-analyses (PRISMA) checklist

Section and Topic	Item #	Checklist item	Location where item is reported
TITLE			
Title	1	Identify the report as a systematic review.	1
ABSTRACT			
Abstract	2	See the PRISMA 2020 for Abstracts checklist.	2
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of existing knowledge.	3
Objectives	4	Provide an explicit statement of the objective(s) or question(s) the review addresses.	3

METHODS			
Eligibility criteria	5	Specify the inclusion and exclusion criteria for the review and how studies were grouped for the syntheses.	4
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.	4
Search strategy	7	Present the full search strategies for all databases, registers and websites, including any filters and limits used.	Supplementary S3
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.	4
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.	4,5

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 (e.g. for all measures, time points, analyses), and if not, the methods used to decide which results to collect.	5
	10b	List and define all other variables for which data were sought (e.g. participant and intervention characteristics, funding sources). Describe any assumptions made about any missing or unclear information.	NA
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.	5
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.	5
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)).	4
	13b	Describe any methods required to prepare the data for presentation or	NA

		synthesis, such as handling of missing summary statistics, or data conversions.	
	13c	Describe any methods used to tabulate or visually display results of individual studies and syntheses.	5
	13d	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.	5
	13e	Describe any methods used to explore possible causes of heterogeneity among study results (e.g. subgroup analysis, meta-regression).	5
	13f	Describe any sensitivity analyses conducted to assess robustness of the synthesized results.	NA
Reporting bias assessment	14	Describe any methods used to assess risk of bias due to missing results in a synthesis (arising from reporting biases).	5
Certainty assessment	15	Describe any methods used to assess certainty (or confidence) in the body of evidence for an outcome.	

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.	5
	16b	Cite studies that might appear to meet the inclusion criteria, but which were excluded, and explain why they were excluded.	Supplementary S10
Study characteristics	17	Cite each included study and present its characteristics.	5
Risk of bias in studies	18	Present assessments of risk of bias for each included study.	Supplementary S8
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.	6
Results of syntheses	20a	For each synthesis, briefly summarise the characteristics and risk of bias among contributing studies.	Supplementary S8
	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	Supplementary S9

		heterogeneity. If comparing groups, describe the direction of the effect.	
	20c	Present results of all investigations of possible causes of heterogeneity among study results.	Supplementary S9
	20d	Present results of all sensitivity analyses conducted to assess the robustness of the synthesized results.	
Reporting biases	21	Present assessments of risk of bias due to missing results (arising from reporting biases) for each synthesis assessed.	NA
Certainty of evidence	22	Present assessments of certainty (or confidence) in the body of evidence for each outcome assessed.	NA
DISCUSSION			
Discussion	23a	Provide a general interpretation of the results in the context of other evidence.	7
	23b	Discuss any limitations of the evidence included in the review.	8
	23c	Discuss any limitations of the review processes used.	8
	23d	Discuss implications of the results for practice, policy, and future	8

		research.	
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.	NA
	24b	Indicate where the review protocol can be accessed, or state that a protocol was not prepared.	
	24c	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.	10
Competing interests	26	Declare any competing interests of review authors.	10
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.	

Supplementary 2

AMSTAR-2 (Assessing the methodological quality of systematic reviews-2)

Guidelines checklist

AMSTAR 2: a critical appraisal tool for systematic reviews that include randomised or non-randomised studies of healthcare interventions, or both

1. Did the research questions and inclusion criteria for the review include the components of PICO?		
For Yes:	Optional (recommended)	
☒ Population	☐ Timeframe for follow-up	☒ Yes
☒ Intervention		☐ No
☒ Comparator group		
☒ Outcome		
2. Did the report of the review contain an explicit statement that the review methods were established prior to the conduct of the review and did the report justify any significant deviations from the protocol?		
For Partial Yes: The authors state that they had a written protocol or guide that included ALL the following:	For Yes: As for partial yes, plus the protocol should be registered and should also have specified:	
☒ review question(s)	☐ a meta-analysis/synthesis plan, if appropriate, <i>and</i>	☐ Yes
☒ a search strategy	☐ a plan for investigating causes of heterogeneity	☒ Partial Yes
☒ inclusion/exclusion criteria	☐ justification for any deviations from the protocol	☐ No
☒ a risk of bias assessment		
3. Did the review authors explain their selection of the study designs for inclusion in the review?		
For Yes, the review should satisfy ONE of the following:		
☐ <i>Explanation for including only RCTs</i>		☒ Yes
☐ <i>OR Explanation for including only NRSI</i>		☐ No
☒ <i>OR Explanation for including both RCTs and NRSI</i>		
4. Did the review authors use a comprehensive literature search strategy?		
For Partial Yes (all the following):	For Yes, should also have (all the following):	
☒ searched at least 2 databases (relevant to research question)	☐ searched the reference lists / bibliographies of included studies	☐ Yes
☒ provided key word and/or search strategy	☐ searched trial/study registries	☒ Partial Yes
☒ justified publication restrictions (e.g. language)	☐ included/consulted content experts in the field	☐ No
	☐ where relevant, searched for grey literature	
	☐ conducted search within 24 months of completion of the review	
5. Did the review authors perform study selection in duplicate?		
For Yes, either ONE of the following:		
☒ at least two reviewers independently agreed on selection of eligible studies and achieved consensus on which studies to include		☒ Yes
☐ OR two reviewers selected a sample of eligible studies <u>and</u> achieved good agreement (at least 80 percent), with the remainder selected by one reviewer.		☐ No

AMSTAR 2: a critical appraisal tool for systematic reviews that include randomised or non-randomised studies of healthcare interventions, or both

6. Did the review authors perform data extraction in duplicate? For Yes, either ONE of the following: <table border="0"> <tr> <td>☒ at least two reviewers achieved consensus on which data to extract from included studies</td> <td>☒ Yes</td> </tr> <tr> <td>☐ OR two reviewers extracted data from a sample of eligible studies <u>and</u> achieved good agreement (at least 80 percent), with the remainder extracted by one reviewer.</td> <td>☐ No</td> </tr> </table>			☒ at least two reviewers achieved consensus on which data to extract from included studies	☒ Yes	☐ OR two reviewers extracted data from a sample of eligible studies <u>and</u> achieved good agreement (at least 80 percent), with the remainder extracted by one reviewer.	☐ No																																
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7. Did the review authors provide a list of excluded studies and justify the exclusions? <table border="0"> <tr> <td>For Partial Yes:</td> <td>For Yes, must also have:</td> <td></td> </tr> <tr> <td>☐ provided a list of all potentially relevant studies that were read in full-text form but excluded from the review</td> <td>☒ Justified the exclusion from the review of each potentially relevant study</td> <td> ☒ Yes ☐ Partial Yes ☐ No </td> </tr> </table>			For Partial Yes:	For Yes, must also have:		☐ provided a list of all potentially relevant studies that were read in full-text form but excluded from the review	☒ Justified the exclusion from the review of each potentially relevant study	☒ Yes ☐ Partial Yes ☐ No																														
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8. Did the review authors describe the included studies in adequate detail? <table border="0"> <tr> <td>For Partial Yes (ALL the following):</td> <td>For Yes, should also have ALL the following:</td> <td></td> </tr> <tr> <td>☐ described populations</td> <td>☒ described population in detail</td> <td>☒ Yes</td> </tr> <tr> <td>☐ described interventions</td> <td>☒ described intervention in detail (including doses where relevant)</td> <td>☐ Partial Yes</td> </tr> <tr> <td>☐ described comparators</td> <td>☒ described comparator in detail (including doses where relevant)</td> <td>☐ No</td> </tr> <tr> <td>☐ described outcomes</td> <td>☒ described study's setting</td> <td></td> </tr> <tr> <td>☐ described research designs</td> <td>☒ timeframe for follow-up</td> <td></td> </tr> </table>			For Partial Yes (ALL the following):	For Yes, should also have ALL the following:		☐ described populations	☒ described population in detail	☒ Yes	☐ described interventions	☒ described intervention in detail (including doses where relevant)	☐ Partial Yes	☐ described comparators	☒ described comparator in detail (including doses where relevant)	☐ No	☐ described outcomes	☒ described study's setting		☐ described research designs	☒ timeframe for follow-up																			
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9. Did the review authors use a satisfactory technique for assessing the risk of bias (RoB) in individual studies that were included in the review? <table border="0"> <tr> <td>RCTs</td> <td></td> <td></td> </tr> <tr> <td>For Partial Yes, must have assessed RoB from:</td> <td>For Yes, must also have assessed RoB from:</td> <td></td> </tr> <tr> <td>☐ unconcealed allocation, <i>and</i></td> <td>☒ allocation sequence that was not truly random, <i>and</i></td> <td>☒ Yes</td> </tr> <tr> <td>☐ lack of blinding of patients and assessors when assessing outcomes (unnecessary for objective outcomes such as all-cause mortality)</td> <td>☒ selection of the reported result from among multiple measurements or analyses of a specified outcome</td> <td>☐ Partial Yes</td> </tr> <tr> <td></td> <td></td> <td>☐ No</td> </tr> <tr> <td></td> <td></td> <td>☐ Includes only NRSI</td> </tr> <tr> <td>NRSI</td> <td></td> <td></td> </tr> <tr> <td>For Partial Yes, must have assessed RoB:</td> <td>For Yes, must also have assessed RoB:</td> <td></td> </tr> <tr> <td>☐ from confounding, <i>and</i></td> <td>☒ methods used to ascertain exposures and outcomes, <i>and</i></td> <td>☒ Yes</td> </tr> <tr> <td>☐ from selection bias</td> <td>☒ selection of the reported result from among multiple measurements or analyses of a specified outcome</td> <td>☐ Partial Yes</td> </tr> <tr> <td></td> <td></td> <td>☐ No</td> </tr> <tr> <td></td> <td></td> <td>☐ Includes only RCTs</td> </tr> </table>			RCTs			For Partial Yes, must have assessed RoB from:	For Yes, must also have assessed RoB from:		☐ unconcealed allocation, <i>and</i>	☒ allocation sequence that was not truly random, <i>and</i>	☒ Yes	☐ lack of blinding of patients and assessors when assessing outcomes (unnecessary for objective outcomes such as all-cause mortality)	☒ selection of the reported result from among multiple measurements or analyses of a specified outcome	☐ Partial Yes			☐ No			☐ Includes only NRSI	NRSI			For Partial Yes, must have assessed RoB:	For Yes, must also have assessed RoB:		☐ from confounding, <i>and</i>	☒ methods used to ascertain exposures and outcomes, <i>and</i>	☒ Yes	☐ from selection bias	☒ selection of the reported result from among multiple measurements or analyses of a specified outcome	☐ Partial Yes			☐ No			☐ Includes only RCTs
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	☒ No																																					

AMSTAR 2: a critical appraisal tool for systematic reviews that include randomised or non-randomised studies of healthcare interventions, or both

11. If meta-analysis was performed did the review authors use appropriate methods for statistical combination of results?									
RCTs For Yes: <table border="0"> <tr> <td>☒ The authors justified combining the data in a meta-analysis</td> <td>☒ Yes</td> </tr> <tr> <td>☒ AND they used an appropriate weighted technique to combine study results and adjusted for heterogeneity if present.</td> <td>☐ No</td> </tr> <tr> <td>☒ AND investigated the causes of any heterogeneity</td> <td>☐ No meta-analysis conducted</td> </tr> </table>		☒ The authors justified combining the data in a meta-analysis	☒ Yes	☒ AND they used an appropriate weighted technique to combine study results and adjusted for heterogeneity if present.	☐ No	☒ AND investigated the causes of any heterogeneity	☐ No meta-analysis conducted		
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12. If meta-analysis was performed, did the review authors assess the potential impact of RoB in individual studies on the results of the meta-analysis or other evidence synthesis?									
For Yes: <table border="0"> <tr> <td>☐ included only low risk of bias RCTs</td> <td>☒ Yes</td> </tr> <tr> <td>☒ OR, if the pooled estimate was based on RCTs and/or NRSI at variable RoB, the authors performed analyses to investigate possible impact of RoB on summary estimates of effect.</td> <td>☐ No</td> </tr> <tr> <td></td> <td>☐ No meta-analysis conducted</td> </tr> </table>		☐ included only low risk of bias RCTs	☒ Yes	☒ OR, if the pooled estimate was based on RCTs and/or NRSI at variable RoB, the authors performed analyses to investigate possible impact of RoB on summary estimates of effect.	☐ No		☐ No meta-analysis conducted		
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13. Did the review authors account for RoB in individual studies when interpreting/ discussing the results of the review?									
For Yes: <table border="0"> <tr> <td>☐ included only low risk of bias RCTs</td> <td>☒ Yes</td> </tr> <tr> <td>☒ OR, if RCTs with moderate or high RoB, or NRSI were included the review provided a discussion of the likely impact of RoB on the results</td> <td>☐ No</td> </tr> </table>		☐ included only low risk of bias RCTs	☒ Yes	☒ OR, if RCTs with moderate or high RoB, or NRSI were included the review provided a discussion of the likely impact of RoB on the results	☐ No				
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14. Did the review authors provide a satisfactory explanation for, and discussion of, any heterogeneity observed in the results of the review?									
For Yes: <table border="0"> <tr> <td>☐ There was no significant heterogeneity in the results</td> <td>☒ Yes</td> </tr> <tr> <td>☒ OR if heterogeneity was present the authors performed an investigation of sources of any heterogeneity in the results and discussed the impact of this on the results of the review</td> <td>☐ No</td> </tr> </table>		☐ There was no significant heterogeneity in the results	☒ Yes	☒ OR if heterogeneity was present the authors performed an investigation of sources of any heterogeneity in the results and discussed the impact of this on the results of the review	☐ No				
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15. If they performed quantitative synthesis did the review authors carry out an adequate investigation of publication bias (small study bias) and discuss its likely impact on the results of the review?									
For Yes: <table border="0"> <tr> <td>☒ performed graphical or statistical tests for publication bias and discussed the likelihood and magnitude of impact of publication bias</td> <td>☒ Yes</td> </tr> <tr> <td></td> <td>☐ No</td> </tr> <tr> <td></td> <td>☐ No meta-analysis conducted</td> </tr> </table>		☒ performed graphical or statistical tests for publication bias and discussed the likelihood and magnitude of impact of publication bias	☒ Yes		☐ No		☐ No meta-analysis conducted		
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	☐ No								
	☐ No meta-analysis conducted								

AMSTAR 2: a critical appraisal tool for systematic reviews that include randomised or non-randomised studies of healthcare interventions, or both

16. Did the review authors report any potential sources of conflict of interest, including any funding they received for conducting the review?

For Yes:

- | | |
|---|---|
| ☒ The authors reported no competing interests OR | ☒ Yes |
| ☐ The authors described their funding sources and how they managed potential conflicts of interest | ☐ No |

To cite this tool: Shea BJ, Reeves BC, Wells G, Thuku M, Hamel C, Moran J, Moher D, Tugwell P, Welch V, Kristjansson E, Henry DA. AMSTAR 2: a critical appraisal tool for systematic reviews that include randomised or non-randomised studies of healthcare interventions, or both. *BMJ*. 2017 Sep 21;358:j4008.

Supplementary 3.

Research question:

What is the efficacy and safety for the use of post-operative colchicine in patients who underwent cardiac ablation techniques reduce atrial fibrillation reoccurrence?

PICO	
Population	Patients who underwent Cardiac Ablation techniques
Intervention	Colchicine
Comparison	Placebo
Outcomes	Primary Outcomes: Atrial Fibrillation Reoccurrences, Pericarditis Secondary Outcomes: Gastrointestinal Adverse Effects, Need for Rehospitalization for cardiological reasons, Cardioversion, Atrial Tachycardia, and repeat ablation

Study Type: Odds Ratio to compare outcomes meta-analysis

MeSH Terms and Keywords:

MeSH Terms				
Data Bases Search Terms	Population	Intervention	Control	Outcomes
Pubmed MeSH Terms	"Ablation Techniques"[Mesh]	"Colchicine"[Mesh]	-	-

Cochrane MeSH Terms	MeSH descriptor: [Ablation Techniques] explode all trees	MeSH descriptor: [Colchicine] explode all trees	-	-
Embase MeSH Terms	-	-	-	-

Keywords			
Population	Intervention	Comparison	Outcome
Ablation Technique Technique, Ablation Techniques, Ablation Ablation, Catheter Catheter Ablation, Transvenous Transvenous Catheter Ablation Ablation, Transvenous Catheter Catheter Ablation, Electric Electrical Catheter Ablation Catheter Ablation, Electrical	Colchicine Colchicine, (R)-Isomer Colchicine, (+-)-Isomer	Placebos Placebo Effect Effect, Placebo Placebo Response Response, Placebo	Atrial Fibrillations Fibrillation, Atrial Fibrillations, Atrial Auricular Fibrillation Auricular Fibrillations Fibrillation, Auricular Fibrillations, Auricular Persistent Atrial Fibrillation Atrial Fibrillation, Persistent Atrial Fibrillations, Persistent

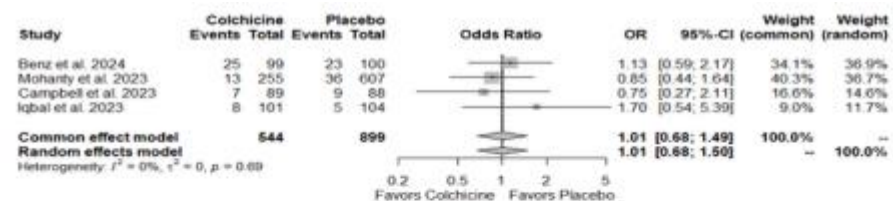
Ablation, Electrical Catheter			Fibrillation, Persistent Atrial
Electric Catheter Ablation			Fibrillations, Persistent Atrial
Ablation, Electric Catheter			Persistent Atrial Fibrillations
Ablation, Transvenous Electric			Familial Atrial Fibrillation
Electric Ablation, Transvenous			Atrial Fibrillation, Familial
Transvenous Electric Ablation			Atrial Fibrillations, Familial
Ablation, Transvenous Electrical			Familial Atrial Fibrillations
Electrical Ablation, Transvenous			Fibrillation, Familial Atrial
Transvenous Electrical Ablation			Fibrillations, Familial Atrial
Catheter Ablation, Radiofrequency			Paroxysmal Atrial Fibrillation
Radiofrequency Catheter Ablation			Atrial Fibrillation, Paroxysmal
Ablation, Radiofrequency Catheter			Atrial Fibrillations, Paroxysmal
Catheter Ablation, Percutaneous			Fibrillation, Paroxysmal Atrial
Percutaneous Catheter Ablation			
Ablation, Percutaneous Catheter			
Cryosurgeries			
Cryoablation			
Cryoablations			
Ablation, Radiofrequency			
Radio Frequency Ablation			

Ablation, Radio Frequency			
Radio-Frequency Ablation			
Ablation, Radio-Frequency			
Radiofrequency Ablation			

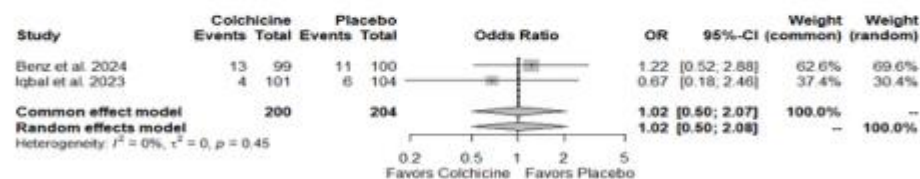
Data Bases	Search Strategy		Results
Pubmed	(("Ablation Techniques"[Mesh]) OR ("Ablation technique*" OR "catheter ablation*" OR "Transvenous Catheter Ablation*" OR "Electrical Catheter Ablation*" OR "Electric Catheter Ablation*" OR "Transvenous Electric Ablation*" OR "Transvenous Electrical Ablation*" OR "Radiofrequency Catheter Ablation*" OR "Percutaneous Catheter Ablation*" OR "Cryosurgery*" OR "Cryoablation*" OR "Radiofrequency Ablation*")) AND (("Colchicine" OR "Colchicine, (R)-Isomer" OR "Colchicine, (+)-Isomer") OR ("Colchicine"[Mesh]))		41
Cochrane	#1	MeSH descriptor: [Colchicine] explode all trees	594
	#2	colchicine*	1412
	#3	#1 OR #2	1413
	#4	MeSH descriptor: [Ablation Techniques] explode all trees	8317
	#5	MeSH descriptor: [Catheter Ablation] explode all trees	2318
	#6	MeSH descriptor: [Radiofrequency Ablation] explode all trees	2472

	#7	MeSH descriptor: [Cryosurgery] explode all trees	503
	#8	(ablation NEXT technique*):ti,ab,kw OR (Transvenous NEXT catheter NEXT ablation*):ti,ab,kw OR (radiofrequency NEXT ablation*):ti,ab,kw OR (cryoablation*):ti,ab,kw OR (electrical NEXT catheter NEXT ablation*):ti,ab,kw (Word variations have been searched)	3583
	#9	#4 OR #5 OR #6 OR #7 OR #8	10593
	#10	#3 AND #9	10
Embase	#1.	('ablation techniques'/exp OR 'ablation techniques' OR 'ablation technique*' OR 'catheter ablation*' OR 'transvenous catheter ablation*' OR 'electrical catheter ablation*' OR 'electric catheter ablation*' OR 'transvenous electric ablation*' OR 'transvenous electrical ablation*' OR 'radiofrequency catheter ablation*' OR 'percutaneous catheter ablation*' OR 'cryosurgery*' OR 'cryoablation*' OR 'radiofrequency ablation*') AND ('colchicine, (r)-isomer' OR 'colchicine, (+-)-isomer' OR 'colchicine'/exp OR 'colchicine')	216
	#2.	#1 AND [embase]/lim NOT ([embase]/lim AND [medline]/lim)	91

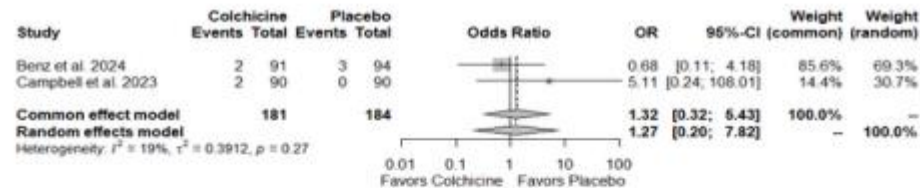
Supplementary 4. Outcomes of use of colchicine in post-ablation: Forest



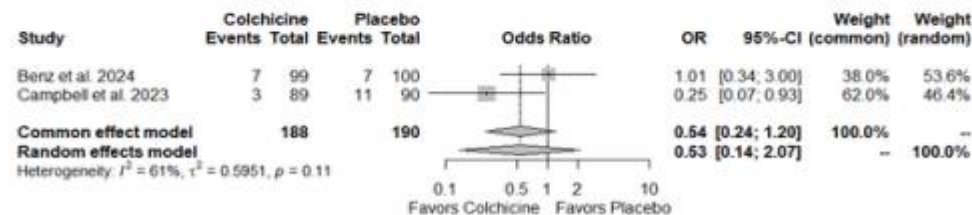
Re-Hospitalization



Cardioversion

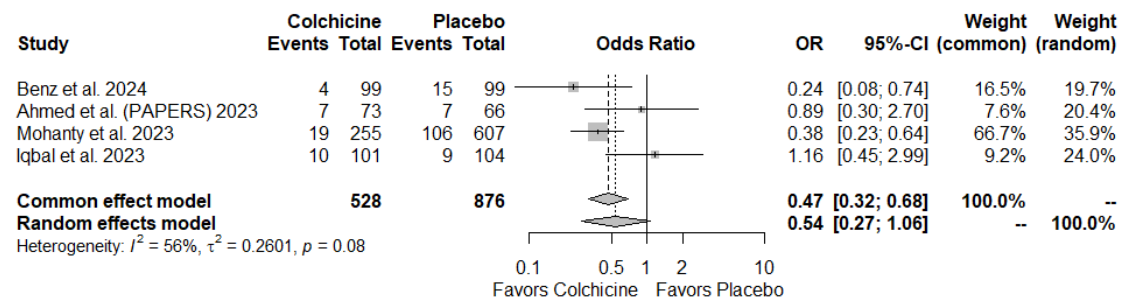


Atrial Tachycardia



Need for Re-Ablation

Plots

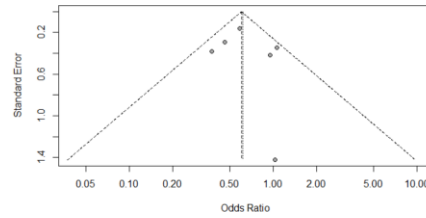


Pericarditis

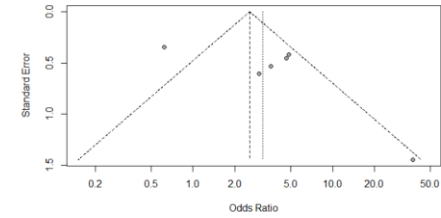
Supplementary 5. Egger's P Test

Outcome Measured	Egger's p-value
Atrial Fibrillation Recurrence	0.6273
Gastrointestinal Effect	0.1782
Repeat Hospitalization	0.7005
Cardioversion	number of studies too small for bias testing
Pericarditis	0.5971
Atrial Tachycardia	number of studies too small for bias testing
Re-ablation	number of studies too small for bias testing

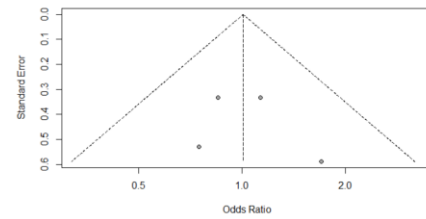
Supplementary 6. Funnel Plots



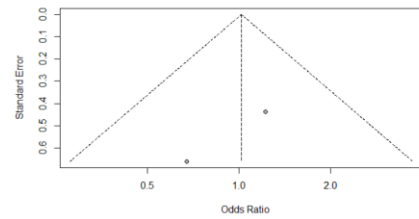
Atrial Fibrillation Recurrence



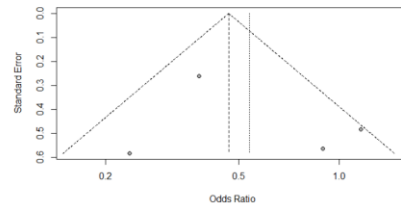
Gastrointestinal Adverse Effects



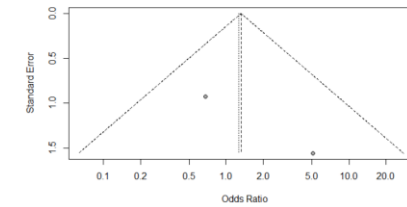
Repeat Hospitalization



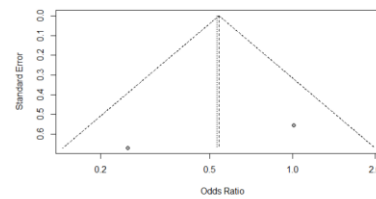
Cardioversion



Pericarditis



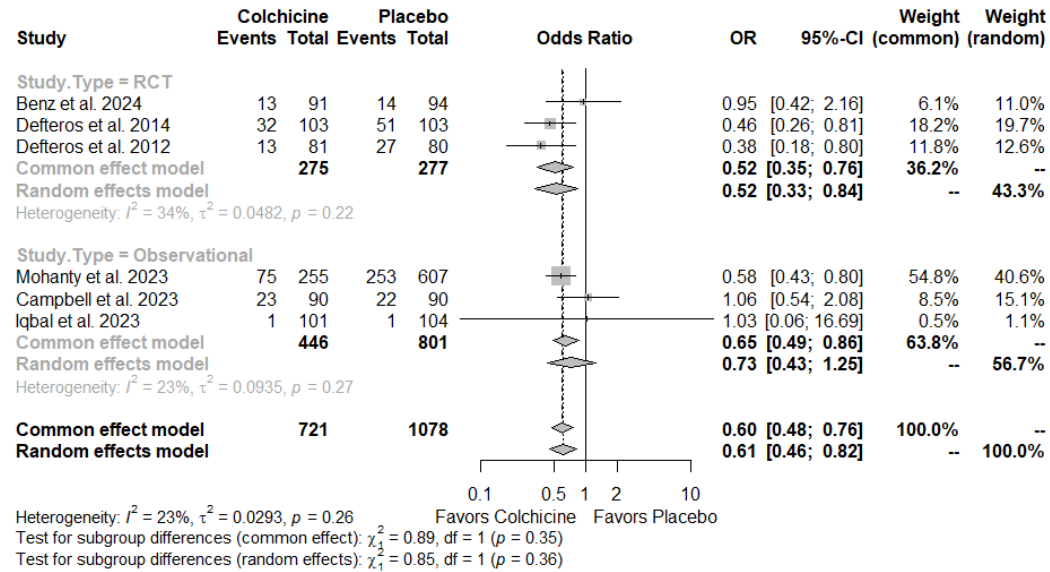
Atrial Tachycardia



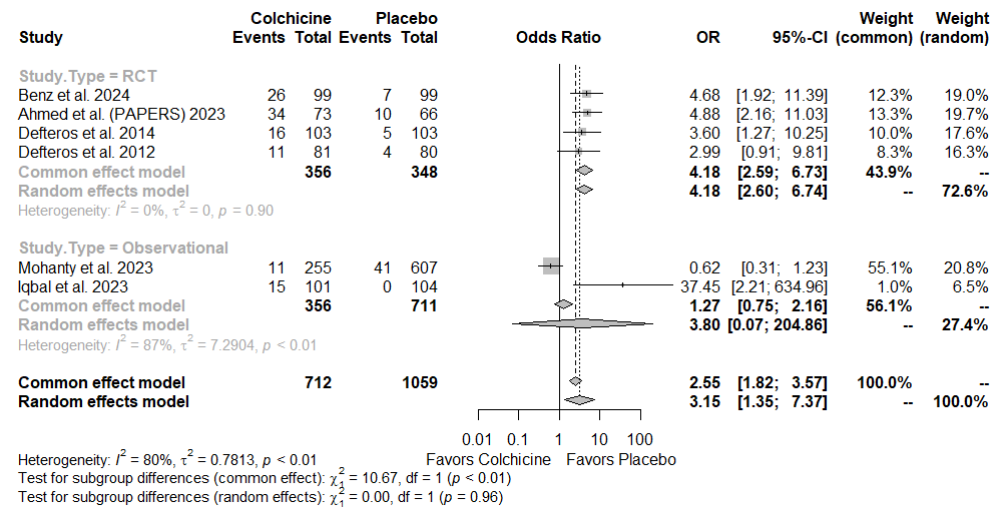
Re-Ablation

Supplementary 7.

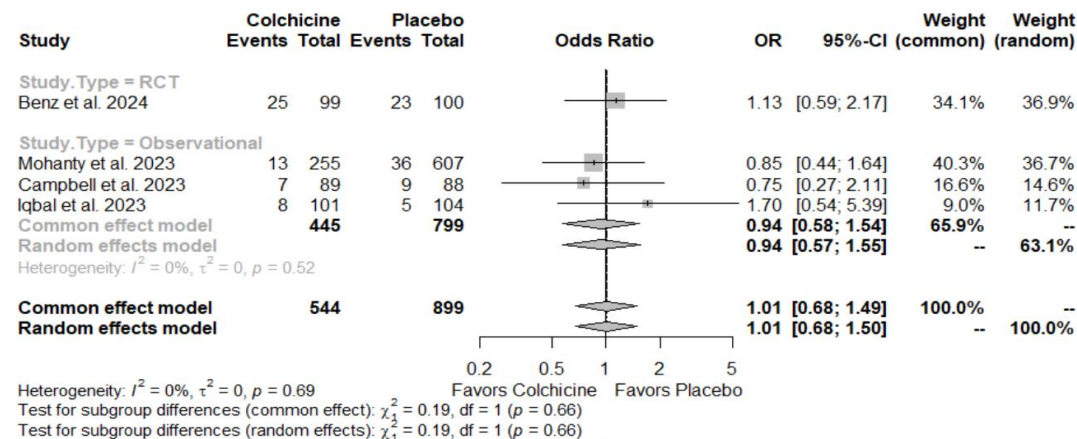
Subgroup analysis of all outcomes according to study type, odds ratio and weight of all studies according to both common and random effects is given. The p-value and results of tests of subgroup difference is also shown.



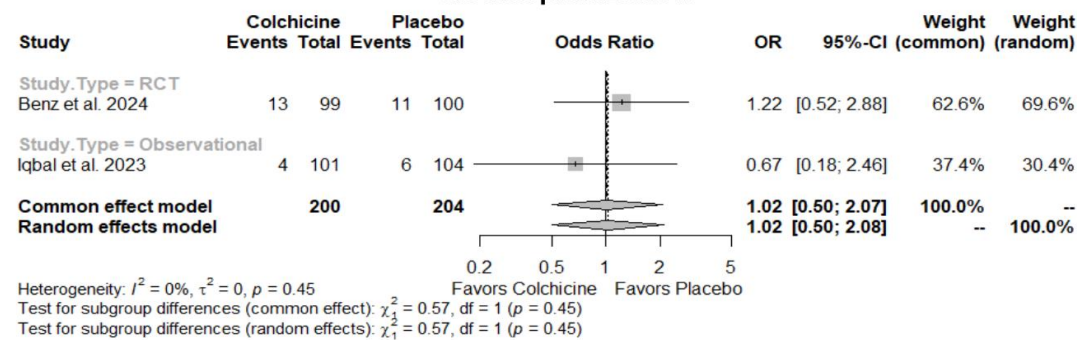
Atrial Fibrillation Recurrence



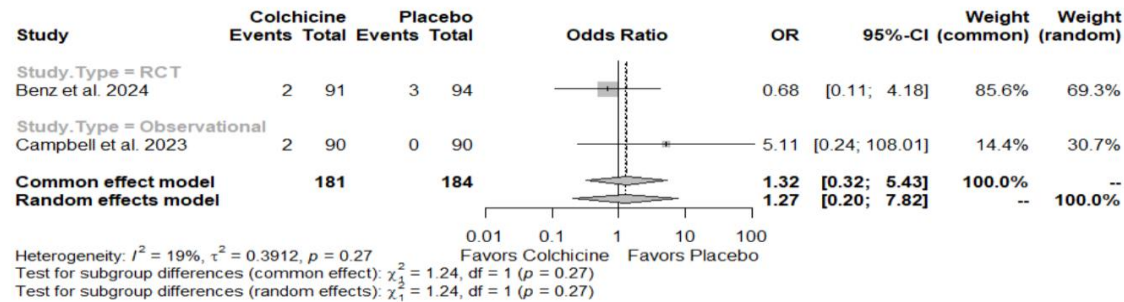
Gastrointestinal Adverse Effects



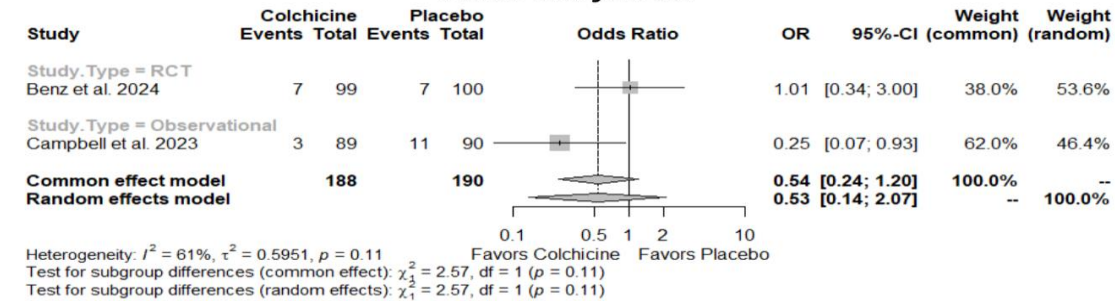
Re-Hospitalization



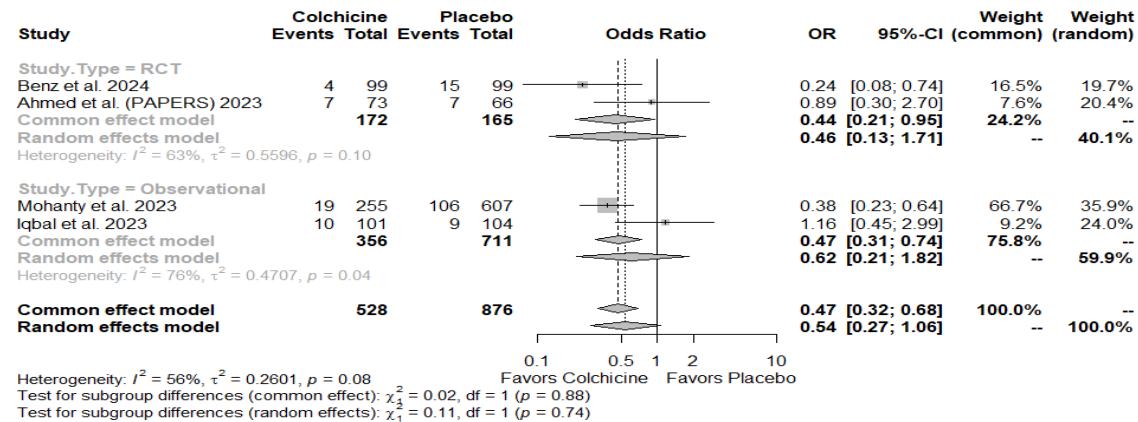
Cardioversion



Atrial Tachycardia



Re-ablation



Pericarditis

Supplementary 8

Cochrane Risk of Bias (ROB) tool assessment for included randomized controlled trials (RCTs)

		Risk of bias domains					
		D1	D2	D3	D4	D5	Overall
Study	Benz et al (2024)						
	Ahmed et al (2023)						
	Deftereos et al (2012)						
	Deftereos et al (2014)						
Domains:		D1: Bias arising from the randomization process. D2: Bias due to deviations from intended intervention. D3: Bias due to missing outcome data. D4: Bias in measurement of the outcome. D5: Bias in selection of the reported result.					Judgement
							 Some concerns
							 Low

Supplementary 9. Newcastle Ottawa Scale for observational studies

[illegible]

Supplementary 10. Heterogeneity and Inconsistency Test

Outcomes	I² Statistic	Cochran' Q P-Value	Tau² Statistic
Atrial Fibrillation Recurrence	22.9%	0.2619	0.0293
Gastrointestinal Adverse Effects	79.5%	0.0002	0.7813
Rehospitalization	0.0%	0.6853	0
Cardioversion	0.0%	0.4515	0
Pericarditis	56.1%	0.771	0.2601
Atrial Tachycardia	19.3%	0.2657	0.3912
Repeat Ablation	61.2%	0.1086	0.5951

Supplementary 11. Excluded Studies

Sr no.	Study Title	Author's Name	Year of Study	References
1	Short-term colchicine after catheter ablation for atrial fibrillation – a randomized, placebo-controlled trial	Alexander P. Benz	2023	1. Benz AP, Amit G, Connolly SJ et al. PO-03-071 short-term colchicine after catheter ablation for atrial fibrillation–a randomized, placebo-controlled trial. Heart Rhythm. 2023;20(5):S456.
2	Impact of short duration colchicine use on reduction of immediate atrial fibrillation after catheter ablation: prospective study	Yasuyuki Egami	2013	1. Egami Y, Nishino M, Kato T et al. Impact of short duration colchicine use on reduction of immediate atrial fibrillation after catheter ablation: prospective study. Journal of the American College of Cardiology. 2013;61(10S):E408-E.
3	Correlation between left atrial epicardial adipose tissue volume and acute effects of colchicine treatment after atrial fibrillation ablation	Yasuyuki Egami	2013	1. Egami Y, Nishino M, Shutta R et al. Correlation between colchicine effects on early atrial fibrillation recurrence after ablation and left atrium epicardial adipose tissue volume. Journal of the American College of Cardiology. 2014;63(12S):A442-A.
4	Effect of low dose colchicine use on recurrence of atrial fibrillation after catheter ablation	Paul M. Kim	2023	1. Kim PM, Al-Sadawi M, Aslam F et al. PO-02-170 EFFECT OF LOW DOSE COLCHICINE USE ON RECURRENCE OF ATRIAL FIBRILLATION AFTER CATHETER ABLATION. Heart Rhythm. 2023;20(5):S299-S300.

Supplementary 12. Baseline Characteristics of Included Studies

First Author	Comparator Group	Sample size	Age	Gender	BMI (kg/msq)	Chronic Heart Failure(n)	Hypertension (n/%)	Diabetes (n/%)	Smoking (n/%)	CAD(n/%)	CKD(n/%)
Benz	Colchicine	99	62	Male (77), Female (22)	29.8	7	50	9	36	6	8
	Placebo	100	61	Male (78), Female (22)	29.7	12	39	10	42	9	4
Ahmed	Colchicine	73	66.0 ± 9.7	Male (52), Female (21)	31.1 ± 6.4	10	48(66%)	11 (15%)	3(4.1%)	14(19%)	7(9.6%)
	Placebo	66	66.0 ± 8.3	Male (50), Female (16)	30.8 ± 5.9	7	42(63%)	15 (23%)	2(3.0%)	18(28%)	3(4.5%)
Mohanty	Colchicine	468	69.4 ± 9.6	Male (295), Female (173)	30.8 ± 6.8	-	135(52.9%)	36 (14.1%)	-	-	-
	Placebo	607	68.1 ± 7.3	Male (448), Female (159)	30.1 ± 6.1	-	338(55.7%)	93(15.3%)	-	-	-
Campbell	Colchicine	90	30.3±5.6	Male (65), Female (25)	32.2	36	67(74.4%)	26 (28.9%)	-	23(25.6%)	-
	Placebo	90	32.2±6.3	Male (64),	30.3	25	62(68.9%)	17 (18.9%)	-	22(24.4%)	-

				Female (16)							
Iqbal	Colchicine	101	66.2± 8.7	Male (66), Female (35)	NA	23	71(70.6%)	24 (23.8%)	-	24(23.8%)	-
	Placebo	104	66.4± 7.9	Male (59), Female (45)	NA	26	74(71.2%)	23 (22.1%)	-	21(20.2%)	-
Defteros	Colchicine	103	62.3±5.7	Male (72), Female (31)	26	26	40(39%)	25 (26%)	35(34%)	35(34%)	-
	Placebo	103	62.2±5.8	Male (70), Female (33)	27	24	44(43%)	27(24%)	37(36%)	34(34%)	-
Defteros	Colchicine	81	62.0±5.9	Male (50), Female (21)	27.0	21	31(38%)	21 (26%)	29(36%)	28(35%)	-
	Placebo	80	62.1±6.0	Male (55), Female (25)	27.2	18	30(38%)	20 (26%)	29(36%)	27(34%)	-