

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

Section and topic	Item No.	Checklist item	Location where item is reported
TITLE			
Title	1	Tixagevimab/cilgavimab prophylaxis against COVID-19 in solid organ transplant recipients: a systematic review and meta-analysis	1
ABSTRACT			
Abstract	2	See the PRISMA 2020 for Abstracts checklist.	1
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of existing knowledge.	2
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, organizations, 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.	4
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
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.	4–5
	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.	4–5
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.	4
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)).	5
	13b	Describe any methods required to prepare the data for presentation or synthesis, such as handling of missing summary statistics, or data conversions.	5
	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.	5
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.	5

Supplementary Table 1. Continued

Section and topic	Item No.	Checklist item	Location where item is reported
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.	5
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.	6
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.	6–7
Results of syntheses	20a	For each synthesis, briefly summarize the characteristics and risk of bias among contributing studies.	6–7
	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.	6–7
	20c	Present results of all investigations of possible causes of heterogeneity among study results.	6–7
	20d	Present results of all sensitivity analyses conducted to assess the robustness of the synthesized results.	6–7
Reporting biases	21	Present assessments of risk of bias due to missing results (arising from reporting biases) for each synthesis assessed.	6
Certainty of evidence	22	Present assessments of certainty (or confidence) in the body of evidence for each outcome assessed.	7
DISCUSSION			
Discussion	23a	Provide a general interpretation of the results in the context of other evidence.	8–11
	23b	Discuss any limitations of the evidence included in the review.	11
	23c	Discuss any limitations of the review processes used.	11
	23d	Discuss implications of the results for practice, policy, and future research.	11
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.	3
	24b	Indicate where the review protocol can be accessed, or state that a protocol was not prepared.	3
	24c	Describe and explain any amendments to information provided at registration or in the protocol.	Not available
Support	25	Describe sources of financial or non-financial support for the review, and the role of the funders or sponsors in the review.	12
Competing interests	26	Declare any competing interests of review authors.	12
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.	12

Supplementary Table 2. Search strategy for each database

Cochrane Library

MeSH descriptor: [Coronavirus] explode all trees OR MeSH descriptor: [SARS-CoV-2] explode all trees OR ("coronavirus"):ti,ab,kw OR (COVID-19):ti,ab,kw OR ("coronavirus infection"):ti,ab,kw OR (2019 nCoV):ti,ab,kw OR (2019nCoV):ti,ab,kw OR (nCov 2019):ti,ab,kw OR (SARS CoV2):ti,ab,kw OR (SARS CoV 2):ti,ab,kw OR (SARSCoV2):ti,ab,kw OR (SARSCoV 2):ti,ab,kw OR (severe acute respiratory syndrome coronavirus 2):ti,ab,kw AND "tixagevimab" OR "cilgavimab" OR "Evusheld" OR "AZD7442" OR "AZD-7442" OR "AZD8895" OR "AZD-8895" OR "AZD1061" OR "AZD-1061" OR "COV2-2130" OR "COV22130" OR "COV22196" OR "COV2-2196"

PubMed

#1 (COVID-19[MeSH Terms]) OR (Coronavirus[MeSH Terms]) OR (SARS-CoV-2[MeSH Terms]) OR (coronavirus[Title/Abstract]) OR (COVID-19[Title/Abstract]) OR (coronavirus infection[Title/Abstract]) OR (2019 nCoV[Title/Abstract]) OR (2019nCoV[Title/Abstract]) OR (nCov 2019[Title/Abstract]) OR (SARS CoV2[Title/Abstract]) OR (SARS CoV 2[Title/Abstract]) OR (SARSCoV2[Title/Abstract]) OR (SARSCoV 2[Title/Abstract]) OR (severe acute respiratory syndrome coronavirus 2[Title/Abstract]) OR (novel corona virus disease[Title/Abstract]) OR (corona virus disease 2019[Title/Abstract]) OR (coronavirus disease 2019[Title/Abstract]) OR (novel coronavirus pneumonia[Title/Abstract]) OR (novel corona virus pneumonia[Title/Abstract])
#2 (tixagevimab OR cilgavimab OR Evusheld OR AZD7442 OR AZD-7442 OR AZD8895 OR AZD-8895 OR AZD1061 OR AZD-1061 OR COV2-2130 OR COV22130 OR COV22196 OR COV2-2196)
#3 #1 AND #2

Web of Science

1. TI= (Coronavirus OR "COVID-19" OR "COVID OR COVID19" OR "SARS-CoV2" OR "SARS-CoV-2" OR SARSCoV2 OR "SARSCoV-2" OR "SARS coronavirus 2" OR "2019 nCoV" OR "2019nCoV" OR "2019-novel CoV" OR "nCov 2019" OR "nCov 19" OR "coronavirus infection" OR "severe acute respiratory syndrome coronavirus 2" OR "novel coronavirus disease" OR "novel corona virus disease" OR "corona virus disease 2019" OR "coronavirus disease 2019" OR "novel coronavirus pneumonia" OR "novel corona virus pneumonia")
2. TI= (tixagevimab OR cilgavimab OR Evusheld OR AZD7442 OR AZD-7442 OR AZD8895 OR AZD-8895 OR AZD1061 OR AZD-1061 OR COV2-2130 OR COV22130 OR COV22196 OR COV2-2196)
3. #1 AND #2

Supplementary Table 3. ROBINS-I (Risk of Bias in Non-randomised Studies - of Interventions) tool results for nonrandomized studies

Study	Confounding	Selection	Classification of interventions	Deviations from intended interventions	Missing data	Measurement of outcomes	Reported result	Overall
Bertrand et al. (2022) [17]	Serious	Serious	Moderate	Moderate	Low	Moderate	Moderate	Moderate
Borštnar et al. (2023) [12]	Serious	Serious	Moderate	Moderate	Low	Moderate	Moderate	Moderate
Grillini et al. (2023) [21]	Serious	Serious	Moderate	Moderate	Low	Moderate	Moderate	Moderate
Jordan et al. (2024) [13]	Moderate	Moderate	Moderate	Moderate	Low	Moderate	Moderate	Moderate
Jurdi et al. (2022) [16]	Moderate	Moderate	Moderate	Moderate	Low	Moderate	Moderate	Moderate
Kaminski et al. (2022) [18]	Serious	Serious	Moderate	Moderate	Low	Moderate	Moderate	Moderate
Morado et al. (2023) [9]	Moderate	Moderate	Moderate	Moderate	Low	Moderate	Moderate	Moderate

Moderate: the study is sound for a non-randomized study with regard to this domain but cannot be considered comparable to a well-performed randomized trial. Low: the study is comparable to a well-performed randomized trial with regard to this domain. Serious risk of bias: the study has some important problems.