Table S1. List of excluded references with reason.

Author, year	Reason of exclusion
Abu Seir, 2021	Younger than 60 years
Ackerson, 2020	No meta-analyzable data
Ali, 2019	No meta-analyzable data
Amand, 2018	Younger than 60 years
Barnes, 2018	No meta-analyzable data
Beran, 2021	No meta-analyzable data
Berginc, 2015	No meta-analyzable data
Blackburn, 2017	No meta-analyzable data
Boattini, 2020	No meta-analyzable data
Boattini, 2021	No meta-analyzable data
Bosco, 2021	No meta-analyzable data
Branche, 2018	No meta-analyzable data
Branche, 2021	No or wrong control group
D. Sieling, 2021	Younger than 60 years
Falsey, 1995	Younger than 60 years
Falsey, 2013	No or wrong control group
Fleming, 2015	No meta-analyzable data
Fu Tseng, 2020	No or wrong control group
Goldestein, 2015	No meta-analyzable data
Gomez, 2021	Review
Green, 2013	No RSV diagnosis
Hansen, 2022	No meta-analyzable data
Hartnett, 2022	No meta-analyzable data
Karstaedt, 2009	No meta-analyzable data
Katsurada, 2017	No meta-analyzable data
Kieke, 2020	No meta-analyzable data
Kim, 2018	No meta-analyzable data
Kujawski, 2022	No meta-analyzable data
Kumar, 2021	No meta-analyzable data
Kurai, 2021	No meta-analyzable data
Kyeyagalire, 2014	No meta-analyzable data
Leaver, 2021	Younger than 60 years
Lee, 2013	No meta-analyzable data
Lee, 2019	No or wrong control group
Lucero-Obusan, 2019	No meta-analyzable data
Matias, 2016	No meta-analyzable data
Mila M, Prill, 2021	No or wrong control group
Mizumoto, 2019	Younger than 60 years
Mullooly, 2006	No meta-analyzable data
Newall, 2008	No RSV diagnosis
Nicholson, 1997	No meta-analyzable data
Pangesti,2019	No meta-analyzable data
Saravanos, 2019	No or wrong control group
Schmidt, 2019	Younger than 60 years
Staadegaard, 2021	No or wrong control group
Stephens, 2021	Review
Sundaram, 2014	No or wrong control group

Author, year	Reason of exclusion
Tempia, 2021	Younger than 60 years
Thompson, 2003	No or wrong control group
Ting Shi, 2019	No meta-analyzable data
Tong, 2020	No or wrong control group
van Asten, 2012	No meta-analyzable data
Walsh, 2004	No or wrong control group
Widmer, 2013	No meta-analyzable data
Wyffles, 2017	No or wrong control group
Wyffles, 2017	No or wrong control group
Yoon, 2020	No or wrong control group
Zheng, 2022	No or wrong control group
Zhou, 2012	No meta-analyzable data

Table S2. Quality of the studies included.

Study, year	Representativeness of the exposed cohort	Selection of the non exposed cohort	Ascertainment of exposure	Demonstration that outcome of interest was not present at start of study	Comparability of cohorts on the basis of the design or analysis	Assessment of outcome	Was follow-up long enough for outcomes to occur	Adequacy of follow up of cohorts
Ackerson, 2019	*	*	*	*	*_	*	*	*
Auvinen, 2021	*	*	*	*	*_	*	*	*
Ellis, 2003	*	*	-	*	*_	*	*	*
Falsey, 2005	*	*	*	*	*_	*	*	*
Falsey, 2021	*	*	*	*	*_	*		*
Rabarison, 2019	*	*	*	*	*_	*	*	*
Malosh, 2017	*	*	*	*	*_	*	*	*
Sharp, 2021	*	*	*	*	*_	*	*	*
Gonçalo Matias, 2017	*	*	-	*	*_	*	*	*
Schanzer., 2008	*	*	-	*	*_	*	*	*
Muller-Pebody, 2006	*	*	-	*	*_	*	*	*
Gilca, 2014	*	*	-	*	*_	*	*	*
Loubet, 2016	*	*	*	*	*_	*	*	*
Falsey, 2021	*	*	*	*	*_	*	*	*

Tseng, 2017	*	*	*	*	*_	*	*	*
Widmer, 2012	*	*	*	*	*_	*	*	*
korsten, 2020	*	*	*	*	*_	*	*	*

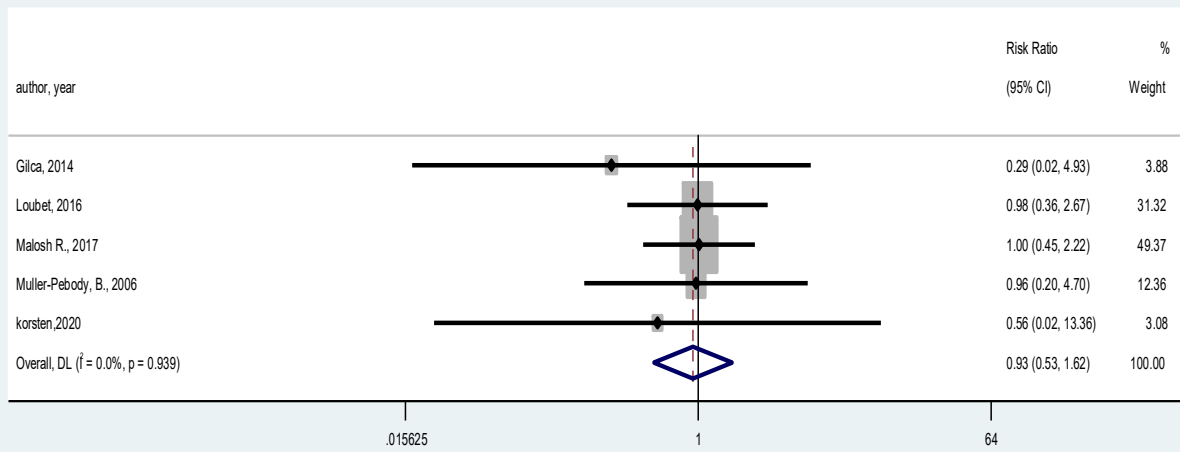


Figure S1. Hospitalization cumulative incidence between RSV and influenza.

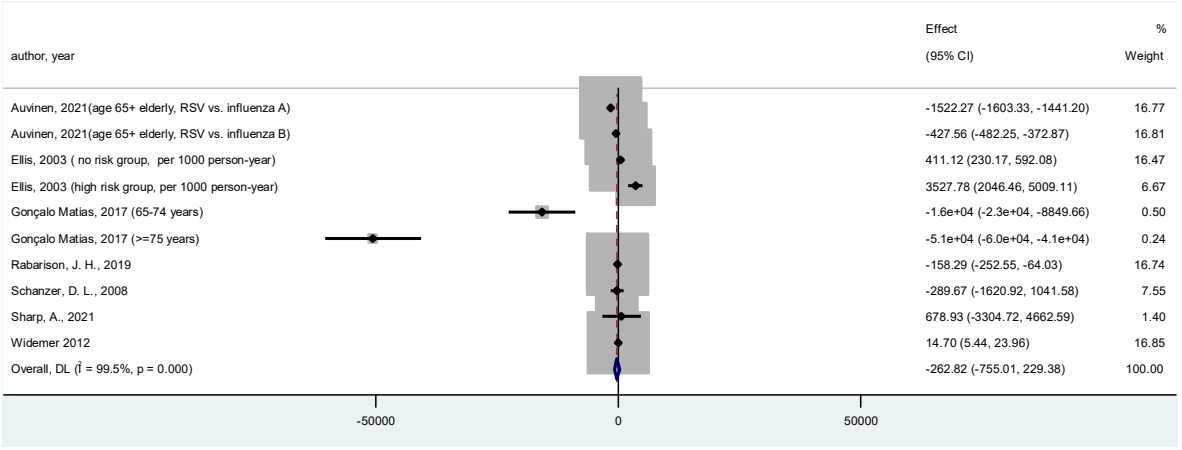


Figure S2. Hospitalization incidence rate (per 100,000 persons/year) between RSV and influenza.

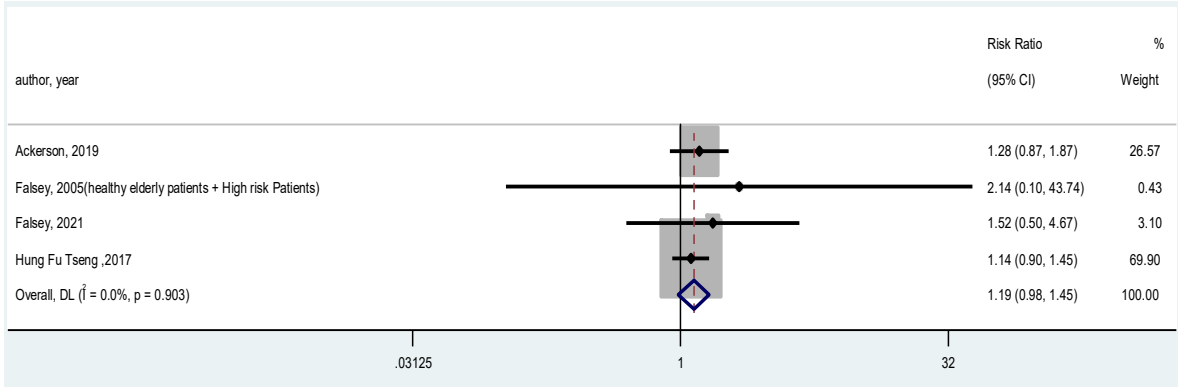


Figure S3. Mortality cumulative incidence between RSV and influenza.

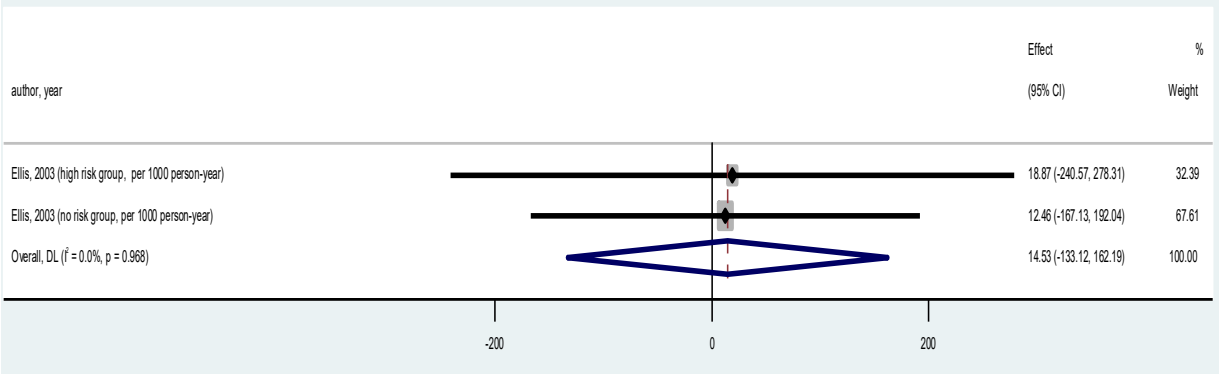
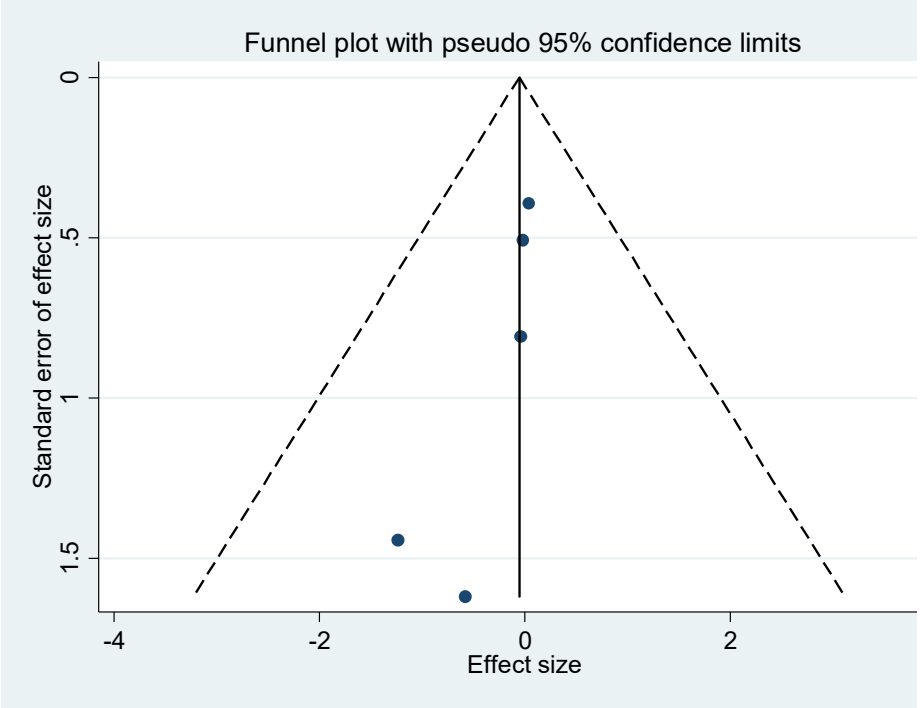
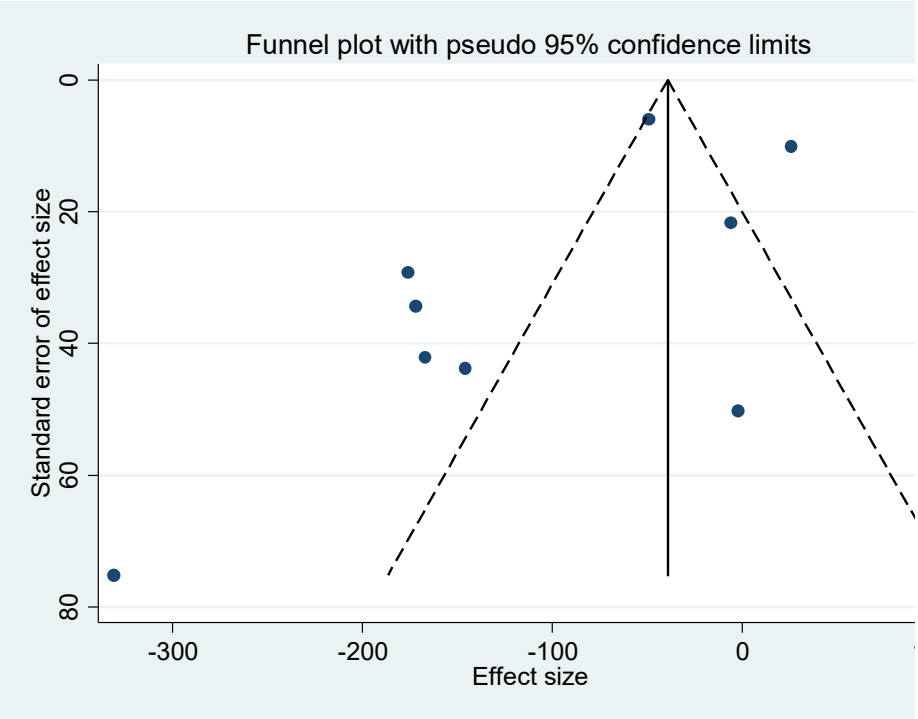


Figure S4. Mortality incidence rate (per 100,000 persons/year) between RSV and influenza.

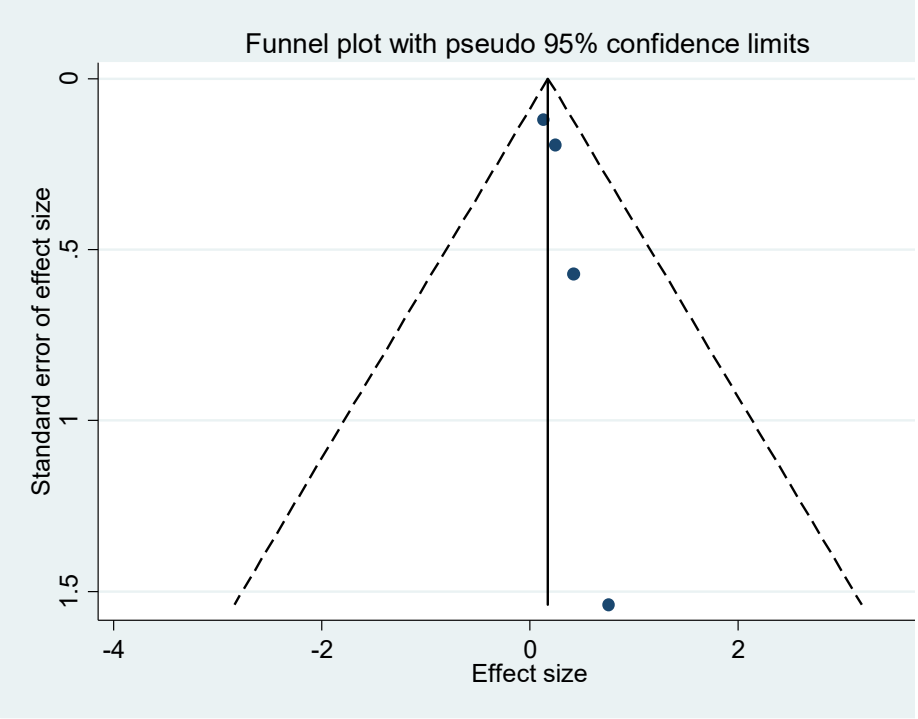


(**A**)

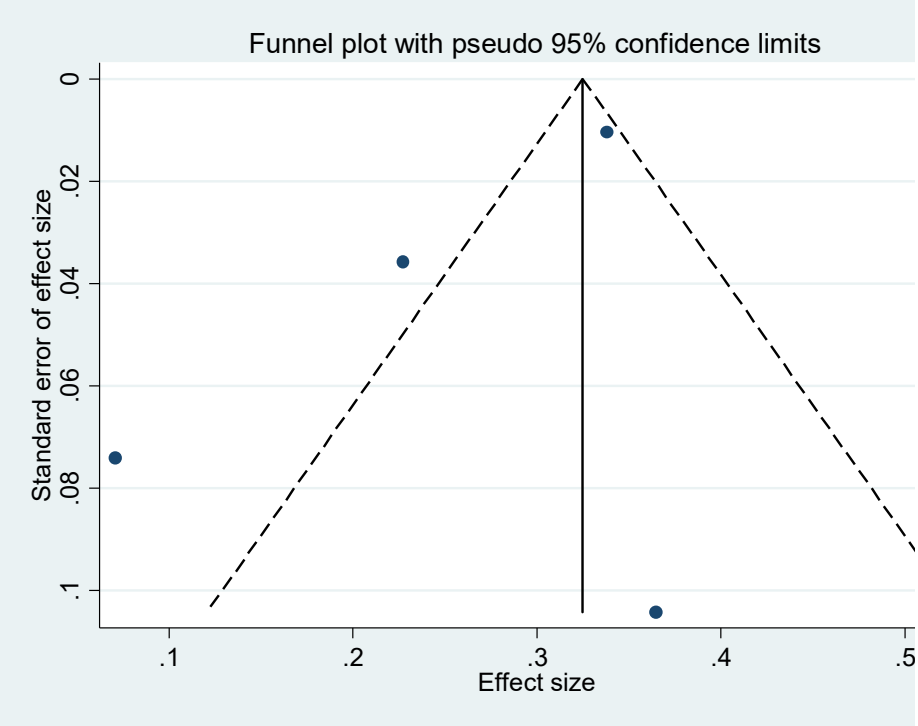


(**B**)

Figure S5. Funnel plots of total cumulative incidence (**A**) and incidence rate (**B**) of hospitalization.



(**A**)



(**B**)

Figure S6. Funnel plots of total cumulative incidence (**A**) and incidence rate (**B**) of mortality.

Table S3. PRISMA 2020 Main Checklist.

Topic	No.	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	
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.	2
METHODS			
Eligibility criteria	5	Specify the inclusion and exclusion criteria for the review and how studies were grouped for the syntheses.	2
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.	2–3
Search strategy	7	Present the full search strategies for all databases, registers and websites, including any filters and limits used.	3
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.	3
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.	3
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	3

		sought (e.g., for all measures, time points, analyses), and if not, the methods used to decide which results to collect.	
	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.	none
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.	3
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.	3
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)).	3
	13b	Describe any methods required to prepare the data for presentation or synthesis, such as handling of missing summary statistics, or data conversions.	none
	13c	Describe any methods used to tabulate or visually display results of individual studies and syntheses.	none
	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.	3
	13e	Describe any methods used to explore possible causes of heterogeneity among study results (e.g., subgroup analysis, meta-regression).	3
	13f	Describe any sensitivity analyses conducted to assess robustness of the synthesized results.	3
Reporting bias assessment	14	Describe any methods used to assess risk of bias due to missing results in a synthesis (arising from reporting biases).	3
Certainty assessment	15	Describe any methods used to assess certainty (or confidence) in the body of evidence for an outcome.	none
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.	4
	16b	Cite studies that might appear to meet the inclusion criteria, but which were excluded, and explain why they were excluded.	8–9
Study characteristics	17	Cite each included study and present its characteristics.	3
Risk of bias in studies	18	Present assessments of risk of bias for each included study.	4–5
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.	5–6
	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.	5–6
	20c	Present results of all investigations of possible causes of heterogeneity among study results.	5–6
	20d	Present results of all sensitivity analyses conducted to assess the robustness of the synthesized results.	6
Reporting biases	21	Present assessments of risk of bias due to missing results (arising from reporting biases) for each synthesis assessed.	none
Certainty of evidence	22	Present assessments of certainty (or confidence) in the body of evidence for each outcome assessed.	none
DISCUSSION			
Discussion	23a	Provide a general interpretation of the results in the context of other evidence.	6–7

	23b	Discuss any limitations of the evidence included in the review.	7
	23c	Discuss any limitations of the review processes used.	7
	23d	Discuss implications of the results for practice, policy, and future research.	7
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.	2
	24b	Indicate where the review protocol can be accessed, or state that a protocol was not prepared.	2
	24c	Describe and explain any amendments to information provided at registration or in the protocol.	none
Support	25	Describe sources of financial or non-financial support for the review, and the role of the funders or sponsors in the review.	7
Competing interests	26	Declare any competing interests of review authors.	7
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.	7

From: Page, M.J.; McKenzie, J.E.; Bossuyt, P.M.; Boutron, I.; Hoffmann, T.C.; Mulrow, C.D.; Shamseer, L.; Tetzlaff, J.M.; Akl, E.A.; Brennan, S.E.; et al. The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *Syst. Rev.* **2021**, *10*, 1–11. https://doi.org/10.31222/osf.io/v7gm2. For more information, visit: www.prisma-statement.org (accessed on: 03 December 2022).