

Supplemental Data

Search Strategy

Embase

(exp 'influenza'/ OR Influenza.ti,ab OR exp 'Respiratory Tract Disease'/ OR Influenzas.ti,ab OR Influenza like.ti,ab OR ILI.ti,ab OR Flu.ti,ab OR Flus.ti,ab OR de 'Common Cold'/ OR "common cold".ti,ab OR colds.ti,ab OR coryza.ti,ab OR exp 'coronavirus'/ OR exp 'SARS coronavirus'/ OR coronavirus.ti,ab OR Coronaviruses.ti,ab OR exp 'coronavirus infection'/ OR exp 'severe acute respiratory syndrome'/ OR "severe acute respiratory syndrome".ti,ab OR "severe acute respiratory syndromes".ti,ab OR sars.ti,ab OR exp 'Pneumovirus'/ OR exp 'Human respiratory syncytial virus'/ OR "respiratory syncytial virus".ti,ab OR "respiratory syncytial viruses".ti,ab OR rsv.ti,ab OR parainfluenza.ti,ab OR "Respiratory illness".ti,ab OR ((Transmission) AND (Coughing OR Sneezing)) OR ((respiratory.ti,ab AND Tract) AND (infection.ti,ab OR Infections.ti,ab OR illness.ti,ab)))

AND

(exp 'hand washing'/ OR handwashing.ti,ab OR hand washing.ti,ab OR ((Hand.ti,ab OR Alcohol.ti,ab) AND (wash.ti,ab OR Washing.ti,ab OR Cleansing.ti,ab OR Rinses.ti,ab OR hygiene.ti,ab OR rub.ti,ab OR Rubbing.ti,ab OR sanitizer.ti,ab OR sanitiser.ti,ab OR cleanser.ti,ab OR disinfected.ti,ab OR Disinfectant.ti,ab OR Disinfect.ti,ab OR antiseptic.ti,ab OR virucid.ti,ab)) OR exp 'protective glove'/ OR Glove.ti,ab OR Gloves.ti,ab OR exp 'mask'/ OR exp 'gas mask'/ OR facemask.ti,ab OR Facemasks.ti,ab OR mask.ti,ab OR Masks.ti,ab OR respirator.ti,ab OR respirators.ti,ab OR de 'protective clothing'/ OR exp 'protective equipment'/ OR "patient isolation".ti,ab OR ((school.ti,ab OR Schools.ti,ab) AND (Closure.ti,ab OR Closures.ti,ab OR Closed.ti,ab)) OR exp 'Quarantine'/ OR quarantine.ti,ab OR "Hygiene intervention".ti,ab OR exp 'mouthwash'/ OR gargling.ti,ab OR "nasal tissues".ti,ab OR exp 'eye protective device'/ OR Glasses.ti,ab OR Goggle.ti,ab OR "Eye protection".ti,ab OR Faceshield.ti,ab OR Faceshields.ti,ab OR Goggles.ti,ab OR "Face shield".ti,ab OR "Face shields".ti,ab OR Visors.ti,ab OR "physical distancing".ti,ab OR "social isolation".ti,ab OR "social distancing".ti,ab OR "physical intervention".ti,ab OR "non-pharmaceutical".ti,ab OR "non pharmaceutical".ti,ab OR N95.ti,ab OR ffp.ti,ab OR ffp1.ti,ab OR ffp3.ti,ab OR ffp2.ti,ab OR N97.ti,ab OR N99.ti,ab OR PPE)

AND

(exp 'meta analysis'/ OR exp 'systematic review'/ OR (meta ADJ3 analy*).ab,ti OR metaanaly*.ab,ti OR review*.ti OR overview*.ti OR (synthes* ADJ3 (literature* OR research* OR studies OR data)).ab,ti OR (pooled AND analys*.ab,ti) OR ((data ADJ2 pool*).ab,ti AND studies.ab,ti) OR medline.ab,ti OR medlars.ab,ti OR embase.ab,ti OR cinahl.ab,ti OR scisearch.ab,ti OR psychinfo.ab,ti OR psycinfo.ab,ti OR psychlit.ab,ti OR psyclit.ab,ti OR cinhal.ab,ti OR cancerlit.ab,ti OR cochrane.ab,ti OR bids.ab,ti OR pubmed.ab,ti OR ovid.ab,ti OR ((hand OR manual OR database* OR computer*) ADJ2 search*).ab,ti OR (electronic ADJ2 (database* OR 'data base' OR 'data bases')).ab,ti OR bibliograph*.ab OR 'relevant journals'.ab OR ((review* OR overview*) ADJ10 (systematic* OR methodologic* OR quantitativ* OR research* OR literature* OR studies OR trial* OR effective*)).ab NOT (((retrospective* OR record* OR case* OR patient*) ADJ2 review*).ab,ti OR ((patient* OR review*) ADJ2 chart*).ab,ti

OR rat.ab,ti OR rats.ab,ti OR mouse.ab,ti OR mice.ab,ti OR hamster.ab,ti OR hamsters.ab,ti OR animal.ab,ti OR animals.ab,ti OR dog.ab,ti OR dogs.ab,ti OR cat.ab,ti OR cats.ab,ti OR bovine.ab,ti OR sheep.ab,ti) NOT (exp 'editorial'/ OR de 'erratum'/ OR exp 'letter'/) NOT (exp 'animal'/ OR exp 'nonhuman'/ NOT (exp 'animal'/ OR exp 'nonhuman'/ AND exp 'human'/))

Pubmed

("Influenza, Human"[Mesh] OR "Influenzavirus A"[Mesh] OR "Influenzavirus B"[Mesh] OR "Influenzavirus C"[Mesh] OR Influenza[tiab] OR "Respiratory Tract Diseases"[Mesh] OR "Bacterial Infections/transmission"[Mesh] OR Influenzas[tiab] OR "Influenza- like"[tiab] OR ILI[tiab] OR Flu[tiab] OR Flus[tiab] OR "Common Cold"[Mesh:NoExp] OR "common cold"[tiab] OR colds[tiab] OR coryza[tiab] OR coronavirus[Mesh] OR "sars virus"[Mesh] OR coronavirus[tiab] OR Coronaviruses[tiab] OR "coronavirus infections"[Mesh] OR "severe acute respiratory syndrome"[Mesh] OR "severe acute respiratory syndrome"[tiab] OR "severe acute respiratory syndromes"[tiab] OR sars[tiab] OR "respiratory syncytial viruses"[Mesh] OR "respiratory syncytial virus, human"[Mesh] OR "Respiratory Syncytial Virus Infections"[Mesh] OR "respiratory syncytial virus"[tiab] OR "respiratory syncytial viruses"[tiab] OR rsv[tiab] OR parainfluenza[tiab] OR "Respiratory illness"[tiab] OR ((Transmission[tiab]) AND (Coughing[tiab] OR Sneezing[tiab])) OR ((respiratory[tiab] AND Tract[tiab]) AND (infection[tiab] OR Infections[tiab] OR illness[tiab])))

AND

("Hand Hygiene"[Mesh] OR handwashing[tiab] OR hand- washing[tiab] OR ((Hand[tiab] OR Alcohol[tiab]) AND (wash[tiab] OR Washing[tiab] OR Cleansing[tiab] OR Rinses[tiab] OR hygiene[tiab] OR rub[tiab] OR Rubbing[tiab] OR sanitizer[tiab] OR sanitiser[tiab] OR cleanser[tiab] OR disinfected[tiab] OR Disinfectant[tiab] OR Disinfect[tiab] OR antiseptic[tiab] OR virucid[tiab])) OR "gloves, protective"[Mesh] OR Glove[tiab] OR Gloves[tiab] OR Masks[Mesh] OR "respiratory protective devices"[Mesh] OR facemask[tiab] OR Facemasks[tiab] OR mask[tiab] OR Masks[tiab] OR respirator[tiab] OR respirators[tiab] OR "Protective Clothing"[Mesh:NoExp] OR "Protective Devices"[Mesh] OR "patient isolation"[tiab] OR ((school[tiab] OR Schools[tiab]) AND (Closure[tiab] OR Closures[tiab] OR Closed[tiab])) OR Quarantine[Mesh] OR quarantine[tiab] OR "Hygiene intervention"[tiab] OR "Mouthwashes"[Mesh] OR gargling[tiab] OR "nasal tissues"[tiab] OR "Eye Protective Devices"[Mesh] OR Glasses[tiab] OR Goggle[tiab] OR "Eye protection"[tiab] OR Faceshield[tiab] OR Faceshields[tiab] OR Goggles[tiab] OR "Face shield"[tiab] OR "Face shields"[tiab] OR Visors[tiab] OR "physical distancing"[tiab] OR "social isolation"[tiab] OR "social distancing"[tiab] OR "physical intervention"[tiab] OR "non-pharmaceutical"[tiab] OR "non pharmaceutical"[tiab] OR N95[tiab] OR ffp[tiab] OR ffp1[tiab] OR ffp3[tiab] OR ffp2[tiab] OR N97[tiab] OR N99[tiab] OR PPE [tiab])

AND

(systematic[sb] OR meta-analysis[pt] OR meta-analysis as topic[mh] OR meta-analysis[mh] OR meta analy*[tw] OR metanaly*[tw] OR metaanaly*[tw] OR met analy*[tw] OR integrative research[tiab] OR integrative review*[tiab] OR integrative overview*[tiab] OR research integration*[tiab] OR research overview*[tiab] OR collaborative review*[tiab] OR collaborative overview*[tiab] OR systematic review*[tiab] OR technology assessment*[tiab] OR technology overview*[tiab] OR "Technology Assessment, Biomedical"[mh] OR HTA[tiab] OR HTAs[tiab] OR

comparative efficacy[tiab] OR comparative effectiveness[tiab] OR outcomes research[tiab] OR indirect comparison*[tiab] OR ((indirect treatment[tiab] OR mixed-treatment[tiab]) AND comparison*[tiab]) OR Embase*[tiab] OR Cinahl*[tiab] OR systematic overview*[tiab] OR methodological overview*[tiab] OR methodologic overview*[tiab] OR methodological review*[tiab] OR methodologic review*[tiab] OR quantitative review*[tiab] OR quantitative overview*[tiab] OR quantitative syntheses*[tiab] OR pooled analy*[tiab] OR Cochrane[tiab] OR Medline[tiab] OR Pubmed[tiab] OR Medlars[tiab] OR handsearch*[tiab] OR hand search*[tiab] OR meta-regression*[tiab] OR metaregression*[tiab] OR data syntheses*[tiab] OR data extraction[tiab] OR data abstraction*[tiab] OR mantel haenszel[tiab] OR peto[tiab] OR dersimonian[tiab] OR dersimonian[tiab] OR fixed effect*[tiab] OR "Cochrane Database SystRev"[Journal: __jrid21711])

NOT

(Animals[Mesh] NOT (Animals[Mesh] AND Humans[Mesh]))

NOT

("Case Reports"[pt] OR Editorial[pt] OR Letter[pt] OR "Observational Study"[pt] OR "Case Report"[ti] OR "Case series"[ti] OR Randomized controlled trial[pt] OR controlled clinical trial[pt] OR randomized[tiab] OR randomised[tiab] OR placebo[tiab] OR "drug therapy"[sh] OR randomly[tiab] OR trial[tiab] OR groups[tiab])

Cochrane Reviews

([mh "Influenza, Human"] OR [mh "Influenzavirus A"] OR [mh "Influenzavirus B"] OR [mh "Influenzavirus C"] OR Influenza:ti,ab OR [mh "Respiratory Tract Diseases"] OR Influenzas:ti,ab OR "Influenza- like":ti,ab OR ILI:ti,ab OR Flu:ti,ab OR Flus:ti,ab OR [mh "Common Cold"] OR "common cold":ti,ab OR colds:ti,ab OR coryza:ti,ab OR [mh coronavirus] OR [mh "sars virus"] OR coronavirus:ti,ab OR Coronaviruses:ti,ab OR [mh "coronavirus infections"] OR [mh "severe acute respiratory syndrome"] OR "severe acute respiratory syndrome":ti,ab OR "severe acute respiratory syndromes":ti,ab OR sars:ti,ab OR [mh "respiratory syncytial viruses"] OR [mh "respiratory syncytial virus, human"] OR [mh "Respiratory Syncytial Virus Infections"] OR "respiratory syncytial virus":ti,ab OR "respiratory syncytial viruses":ti,ab OR rsv:ti,ab OR parainfluenza:ti,ab OR "Respiratory illness":ti,ab OR ((Transmission) AND (Coughing OR Sneezing)) OR ((respiratory:ti,ab AND Tract) AND (infection:ti,ab OR Infections:ti,ab OR illness:ti,ab)) OR "physical distancing":ti,ab OR "social isolation":ti,ab OR "social distancing":ti,ab OR "physical intervention":ti,ab OR "non-pharmaceutical":ti,ab OR "non pharmaceutical":ti,ab OR N95:ti,ab OR ffp:ti,ab OR ffp1:ti,ab OR ffp3:ti,ab OR ffp2:ti,ab OR N97:ti,ab OR N99:ti,ab OR PPE)

AND

([mh "Hand Hygiene"] OR handwashing:ti,ab OR "hand- washing":ti,ab OR ((Hand:ti,ab OR Alcohol:ti,ab) AND (wash:ti,ab OR Washing:ti,ab OR Cleansing:ti,ab OR Rinses:ti,ab OR hygiene:ti,ab OR rub:ti,ab OR Rubbing:ti,ab OR sanitizer:ti,ab OR sanitiser:ti,ab OR cleanser:ti,ab OR disinfected:ti,ab OR Disinfectant:ti,ab OR Disinfect:ti,ab OR antiseptic:ti,ab OR virucid:ti,ab)) OR [mh "gloves, protective"] OR Glove:ti,ab OR Gloves:ti,ab OR [mh Masks] OR [mh "respiratory protective devices"] OR facemask:ti,ab OR Facemasks:ti,ab OR mask:ti,ab OR Masks:ti,ab OR respirator:ti,ab OR respirators:ti,ab OR [mh "Protective Clothing"] OR [mh

"Protective Devices"] OR "patient isolation":ti,ab OR ((school:ti,ab OR Schools:ti,ab) AND (Closure:ti,ab OR Closures:ti,ab OR Closed:ti,ab)) OR [mh Quarantine] OR quarantine:ti,ab OR "Hygiene intervention":ti,ab OR [mh Mouthwashes] OR gargling:ti,ab OR "nasal tissues":ti,ab OR [mh "Eye Protective Devices"] OR Glasses:ti,ab OR Goggle:ti,ab OR "Eye protection":ti,ab OR Faceshield:ti,ab OR Faceshields:ti,ab OR Goggles:ti,ab OR "Face shield":ti,ab OR "Face shields":ti,ab OR Visors:ti,ab)

AND

([mh "Communicable Disease Control"] OR [mh "Disease Outbreaks"] OR [mh "Disease Transmission, Infectious"] OR [mh "Infection Control"] OR "Communicable Disease Control":ti,ab OR "Secondary transmission":ti,ab OR ((Reduced:ti,ab OR Reduce:ti,ab OR Reduction:ti,ab OR Reducing:ti,ab OR Lower:ti,ab) AND (Incidence:ti,ab OR Occurrence:ti,ab OR Transmission:ti,ab OR Secondary:ti,ab)))

CINAHL

((MH "Influenza, Human+") OR (MH "Orthomyxoviridae+") OR TI Influenza OR AB Influenza OR (MH "Respiratory Tract Diseases+") OR TI Influenzas OR AB Influenzas OR TI Influenza- like OR AB Influenza- like OR TI ILI OR AB ILI OR TI Flu OR AB Flu OR TI Flus OR AB Flus OR (MH "Common Cold+") OR TI "common cold" OR AB "common cold" OR TI colds OR AB colds OR TI coryza OR AB coryza OR (MH "coronavirus+") OR (MH "sars virus+") OR TI coronavirus OR AB coronavirus OR TI Coronaviruses OR AB Coronaviruses OR (MH "coronavirus infections+") OR (MH "severe acute respiratory syndrome+") OR TI "severe acute respiratory syndrome" OR AB "severe acute respiratory syndrome" OR TI "severe acute respiratory syndromes" OR AB "severe acute respiratory syndromes" OR TI sars OR AB sars OR (MH "respiratory syncytial viruses+") OR TI "respiratory syncytial virus" OR AB "respiratory syncytial virus" OR TI "respiratory syncytial viruses" OR AB "respiratory syncytial viruses" OR TI rsv OR AB rsv OR TI parainfluenza OR AB parainfluenza OR TI "Respiratory illness" OR AB "Respiratory illness" OR ((Transmission) AND (Coughing OR Sneezing)) OR ((TI respiratory OR AB respiratory AND Tract) AND (TI infection OR AB infection OR TI Infections OR AB Infections OR TI illness OR AB illness)))

AND

((MH "Handwashing+") OR TI handwashing OR AB handwashing OR TI hand- washing OR AB hand- washing OR ((TI Hand OR AB Hand OR TI Alcohol OR AB Alcohol) AND (TI wash OR AB wash OR TI Washing OR AB Washing OR TI Cleansing OR AB Cleansing OR TI Rinses OR AB Rinses OR TI hygiene OR AB hygiene OR TI rub OR AB rub OR TI Rubbing OR AB Rubbing OR TI sanitizer OR AB sanitiser OR TI sanitizer OR AB sanitiser OR TI cleanser OR AB cleanser OR TI disinfected OR AB disinfected OR TI Disinfectant OR AB Disinfectant OR TI Disinfect OR AB Disinfect OR TI antiseptic OR AB antiseptic OR TI virucid OR AB virucid)) OR (MH "gloves+") OR TI Glove OR AB Glove OR Gloves OR (MH "Masks+") OR (MH "respiratory protective devices+") OR TI facemask OR AB facemask OR TI Facemasks OR AB Facemasks OR TI mask OR AB mask OR TI Masks OR AB Masks OR TI respirator OR AB respirator OR TI respirators OR AB respirators OR (MH "Protective Clothing") OR (MH "Protective Devices+") OR TI "patient isolation" OR AB "patient isolation" OR ((TI school OR AB school OR TI Schools OR AB Schools) AND (TI Closure OR AB Closure OR TI Closures OR AB Closures OR TI Closed OR AB Closed)) OR (MH "Quarantine+") OR TI quarantine OR AB quarantine OR TI

"Hygiene intervention" OR AB "Hygiene intervention" OR (MH "Mouthwashes+") OR TI gargling OR AB gargling OR TI "nasal tissues" OR AB "nasal tissues" OR (MH "Eye Protective Devices+") OR TI Glasses OR AB Glasses OR TI Goggle OR AB Goggle OR TI "Eye protection" OR AB "Eye protection" OR TI Faceshield OR AB Faceshield OR TI Faceshields OR AB Faceshields OR TI Goggles OR AB Goggles OR TI "Face shield" OR AB "Face shield" OR TI "Face shields" OR AB "Face shields" OR TI Visors OR AB Visors OR TI "physical distancing" OR AB "physical distancing" OR TI "social isolation" OR AB "social isolation" OR TI "social distancing" OR AB "social distancing" OR TI "physical intervention" OR AB "physical intervention" OR TI "non-pharmaceutical" OR AB "non-pharmaceutical" OR TI "non pharmaceutical" OR AB "non pharmaceutical" OR TI N95 OR AB N95 OR TI ffp OR AB ffp OR TI ffp1 OR AB ffp1 OR TI ffp3 OR AB ffp3 OR TI ffp2 OR AB ffp2 OR TI N97 OR AB N97 OR TI N99 OR AB N99 OR TI PPE OR AB PPE)

AND

((MH "Infection Control+") OR (MH "Disease Outbreaks+") OR (MH "Infection Control+") OR TI "Communicable Disease Control" OR AB "Communicable Disease Control" OR TI "Secondary transmission" OR AB "Secondary transmission" OR ((TI Reduced OR AB Reduced OR TI Reduce OR AB Reduce OR TI Reduction OR AB Reduction OR TI Reducing OR AB Reducing OR TI Lower OR AB Lower) AND (TI Incidence OR AB Incidence OR TI Occurrence OR AB Occurrence OR TI Transmission OR AB Transmission OR TI Secondary OR AB Secondary))))

AND

((MH "Meta Analysis") OR TI meta analys* OR AB meta analys* OR TI Metaanaly* OR AB metaanalys* OR (MH "Literature Review+") OR TI systematic review* OR AB systematic review* OR TI systematic overview* OR AB systematic overview* NOT (PT commentary OR PT letter OR PT editorial OR MH animals+))

Supplemental Table 1. Excluded studies and respective reasons

Study	Notes
Uchida 2013	Exclusion reason: Wrong patient population
Jefferson 2009	Exclusion reason: Companion Report
Halton 2013	Exclusion reason: Wrong patient population
Jackson 2013	Exclusion reason: Wrong outcomes
Dugre 2020	Exclusion reason: Wrong study design
Sharma 2020	Exclusion reason: Wrong patient population
Coclite 2020	Exclusion reason: Published 2021
Ahmed 2018	Exclusion reason: Wrong outcomes
Ide 2016	Exclusion reason: Wrong patient population
Chaabna 2020	Exclusion reason: Published 2021
Serra 2014	Exclusion reason: Wrong outcomes
Saunders-Hastings 2017	Exclusion reason: Wrong patient population
Barasheed 2016	Exclusion reason: Wrong patient population
Cascini 2020	Exclusion reason: Wrong outcomes;
Fricke 2021	Exclusion reason: Published 2021
Zivich 2018	Exclusion reason: Wrong outcomes
bin-Reza 2012	Exclusion reason: Wrong patient population
Ryu 2020	Exclusion reason: Wrong outcomes
Chu 2020	Exclusion reason: Duplicate
Alqahtani 2020	Exclusion reason: Can't get access
Viner 2020	Exclusion reason: Wrong outcomes
Sjogren 2008	Exclusion reason: Wrong outcomes
Shi 2020	Exclusion reason: Wrong outcomes
Saunders-Hastings 2016	Exclusion reason: Wrong study design
Nussbaumer-Streit 2020	Exclusion reason: Wrong study design
Nussbaumer-Streit 2020	Exclusion reason: Wrong study design
Long 2020	Exclusion reason: Wrong patient population
Liu 2018	Exclusion reason: Wrong outcomes
Girum 2020	Exclusion reason: Wrong study design
Chughtai 2019	Exclusion reason: Wrong outcomes
Chughtai 2020	Exclusion reason: Wrong outcomes
Chetty 2020	Exclusion reason: Wrong study design
Burns 2020	Exclusion reason: Wrong study design
Camargo 2020	Exclusion reason: Non-English Article
Burns 2020	Exclusion reason: Companion Report
Braithwaite 2020	Exclusion reason: Wrong study design
BinNafisah 2018	Exclusion reason: Wrong study design

Beaudry 2020	Exclusion reason: Wrong outcomes
Lahiri 2020	Exclusion reason: Wrong study design
Koh 2020	Exclusion reason: Wrong intervention
Halton 2012	Exclusion reason: Wrong study design
Gralton 2010	Exclusion reason: Wrong patient population
Joshi 2013	Exclusion reason: Wrong study design
Jessop 2020	Exclusion reason: Wrong patient population
Jefferson 2008	Exclusion reason: Companion Report
Jefferson 2010	Exclusion reason: Companion Report
Jefferson 2011	Exclusion reason: Companion Report
Ortega 2020	Exclusion reason: Wrong intervention
Taminato 2020	Exclusion reason: Wrong patient population
Solia 2020	Exclusion reason: Wrong study design
Shimabukuro 2020	Exclusion reason: Wrong setting
Shah 2020	Exclusion reason: Wrong intervention
Serra 2014	Exclusion reason: Non-English Article
Santos 2020	Exclusion reason: Wrong intervention
Rowbotham 2019	Exclusion reason: Wrong outcomes
Moradali 2020	Exclusion reason: Wrong outcomes
Mayr 2020	Exclusion reason: Non-English Article
Marasinghe 2020	Exclusion reason: Wrong outcomes
Lee 2020	Exclusion reason: Wrong intervention
Lakhani 2020	Exclusion reason: Wrong study design
Gholami 2021	Exclusion reason: Wrong patient population
French 2016	Exclusion reason: Wrong patient population
Burton 2020	Exclusion reason: Wrong intervention
Bulfone 2020	Exclusion reason: Wrong intervention
Brankston 2007	Exclusion reason: Wrong study design
Bo≈koski 2020	Exclusion reason: Wrong study design
Barycka 2020	Exclusion reason: Wrong patient population
Bartoszko 2020	Exclusion reason: Wrong patient population
Barbato 2020	Exclusion reason: Wrong patient population
Aboelela 2006	Exclusion reason: Wrong patient population
OlrydeLabry-Lima 2020	Exclusion reason: Wrong study design
Benkouiten 2014	Exclusion reason: Wrong study design
Zhen 2020	Exclusion reason: Wrong study design
Yin 2021	Exclusion reason: Wrong patient population
Xiang 2021	Exclusion reason: Wrong study design
Wang 2019	Exclusion reason: Wrong patient population

Violante 2020	Exclusion reason: Wrong study design
Verbeek 2019	Exclusion reason: Wrong patient population
urRahman 2018	Exclusion reason: Wrong patient population
Tran 2012	Exclusion reason: Wrong patient population
Tian 2021	Exclusion reason: Wrong patient population
Tian 2020	Exclusion reason: Wrong patient population
Tabatabaeizadeh 2021	Exclusion reason: Wrong patient population
Thomas 2017	Exclusion reason: Wrong study design
Smith 2016	Exclusion reason: Wrong patient population
Sharma 2019	Exclusion reason: Wrong study design
Schmidt 2020	Exclusion reason: Wrong study design
Samaranayake 2020	Exclusion reason: Wrong patient population
Ryan 2020	Exclusion reason: Wrong study design
Ryan 2020	Exclusion reason: Wrong study design
Rios 2020	Exclusion reason: Wrong outcomes
Rashid 2015	Exclusion reason: Wrong study design
Rahimi 2020	Exclusion reason: Wrong outcomes
Patel 2020	Exclusion reason: Wrong outcomes
Pasquini-Descomps 2017	Exclusion reason: Wrong outcomes
Paludan-MVøller 2020	Exclusion reason: Wrong outcomes
Offeddu 2017	Exclusion reason: Wrong patient population
Noorimotlagh 2021	Exclusion reason: Wrong outcomes
Mhango 2020	Exclusion reason: Wrong patient population
Mbakaya 2020	Exclusion reason: Wrong outcomes
Li 2020	Exclusion reason: Wrong patient population
Lee 2009	Exclusion reason: Wrong study design
Lee 2005	Exclusion reason: Wrong study design
Lahiri 2020	Exclusion reason: Wrong study design
Kwok 2019	Exclusion reason: Wrong study design
Krishnaratne 2020	Exclusion reason: Wrong study design
Johanna 2020	Exclusion reason: Wrong study design
Jefferson 2007	Exclusion reason: Companion Report
Jefferson 2010	Exclusion reason: Companion Report
Jain 2020	Exclusion reason: Wrong study design
Jackson 2014	Exclusion reason: Wrong study design
Iannone 2020	Exclusion reason: Wrong patient population
Hopman 2019	Exclusion reason: Wrong study design
GarciaGodoy 2020	Exclusion reason: Wrong study design
FouladiDehaghi 2020	Exclusion reason: Wrong patient population

Daryai 2020	Exclusion reason: Wrong study design
Burton 2020	Exclusion reason: Wrong patient population
Burton 2020	Exclusion reason: Wrong patient population
Arefi 2020	Exclusion reason: Wrong study design
Amaechi 2020	Exclusion reason: Wrong study design
Brainard 2020	Exclusion reason: Wrong study design
Aledort 2007	Exclusion reason: Wrong study design

Supplemental Table 2. PRISMA 2020 Checklist

Section and Topic	Item #	Checklist item	Location where item is reported
TITLE			
Title	1	Identify the report as a systematic review.	Lines 2, 59-61
ABSTRACT			
Abstract	2	See the PRISMA 2020 for Abstracts checklist.	Page 2
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of existing knowledge.	Lines 52-60
Objectives	4	Provide an explicit statement of the objective(s) or question(s) the review addresses.	Lines 65-68
METHODS			
Eligibility criteria	5	Specify the inclusion and exclusion criteria for the review and how studies were grouped for the syntheses.	Lines 99-125
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.	Lines 89-96
Search strategy	7	Present the full search strategies for all databases, registers and websites, including any filters and limits used.	Supplemental Data
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.	Lines 83-129
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.	Lines 129-146
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.	Lines 139-141
	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.	Lines 136-146
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.	Lines 149-160
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.	Lines 163-168
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)).	n/a
	13b	Describe any methods required to prepare the data for presentation or synthesis, such as handling of missing summary statistics, or data conversions.	n/a
	13c	Describe any methods used to tabulate or visually display results of individual studies and syntheses.	Line 163-165
	13d	Describe any methods used to synthesize results and provide a rationale for the choice(s). If meta-analysis was performed, describe	Lines 163-

Section and Topic	Item #	Checklist item	Location where item is reported
		the model(s), method(s) to identify the presence and extent of statistical heterogeneity, and software package(s) used.	168
	13e	Describe any methods used to explore possible causes of heterogeneity among study results (e.g. subgroup analysis, meta-regression).	n/a
	13f	Describe any sensitivity analyses conducted to assess robustness of the synthesized results.	n/a
Reporting bias assessment	14	Describe any methods used to assess risk of bias due to missing results in a synthesis (arising from reporting biases).	n/a
Certainty assessment	15	Describe any methods used to assess certainty (or confidence) in the body of evidence for an outcome.	n/a
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.	Lines 175-180
	16b	Cite studies that might appear to meet the inclusion criteria, but which were excluded, and explain why they were excluded.	Supplemental table 1
Study characteristics	17	Cite each included study and present its characteristics.	Table 2-4
Risk of bias in studies	18	Present assessments of risk of bias for each included study.	Supplemental table 3
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.	Table 2-4
Results of syntheses	20a	For each synthesis, briefly summarise the characteristics and risk of bias among contributing studies.	Tables 2-4 and Supplemental Table 3
	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.	n/a
	20c	Present results of all investigations of possible causes of heterogeneity among study results.	n/a
	20d	Present results of all sensitivity analyses conducted to assess the robustness of the synthesized results.	n/a
Reporting biases	21	Present assessments of risk of bias due to missing results (arising from reporting biases) for each synthesis assessed.	n/a
Certainty of evidence	22	Present assessments of certainty (or confidence) in the body of evidence for each outcome assessed.	n/a
DISCUSSION			
Discussion	23a	Provide a general interpretation of the results in the context of other evidence.	Lines 314-323
	23b	Discuss any limitations of the evidence included in the review.	Lines 354-356
	23c	Discuss any limitations of the review processes used.	Lines 356-359

Section and Topic	Item #	Checklist item	Location where item is reported
	23d	Discuss implications of the results for practice, policy, and future research.	Lines 364-370
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.	Line 404
	24b	Indicate where the review protocol can be accessed, or state that a protocol was not prepared.	n/a
	24c	Describe and explain any amendments to information provided at registration or in the protocol.	n/a
Support	25	Describe sources of financial or non-financial support for the review, and the role of the funders or sponsors in the review.	Line 400
Competing interests	26	Declare any competing interests of review authors.	Lines 398
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.	Lines 400

Supplemental Table 3. AMSTAR GRADING

CRITERIA #	1	2	3	4	5	6
STUDY (ID#)	Did the research questions and inclusion criteria for the review include the components of PICO?	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 and significant deviations from the protocol?	Did the review authors explain their selection of the study designs for inclusion in the review?	Did the review authors use a comprehensive literature search strategy?	Did the authors perform study selection in duplicate	Did the review authors perform data extraction in duplicate?
Chu 2020 (1)	YES	YES	NO	YES	YES	YES
Jefferson 2020 (2)	YES	YES	YES	YES	YES	YES
Aggarwal 2020 (3)	YES	NO	NO	PARTIAL YES	YES	YES
Gera 2018 (4)	YES	YES	YES	YES	YES	YES
Rabie 2006 (5)	YES	NO	NO	PARTIAL YES	YES	YES
Wang 2020 (6)	YES	NO	YES	PARTIAL YES	YES	YES
Wong 2014 (7)	YES	NO	NO	PARTIAL YES	YES	YES
Abdullahi 2020 (8)	YES	YES	NO	PARTIAL YES	YES	YES
Liang 2020 (9)	YES	NO	NO	PARTIAL YES	YES	YES
Xiao 2020 (10)	YES	NO	YES	PARTIAL YES	YES	YES
Rainwater-Lovett 2014 (11)	YES	NO	NO	NO	YES	NO
Chou 2020 (12)	YES	NO	YES	YES	NO	NO
McGuinness 2018 (13)	YES	YES	NO	YES	YES	YES
Moncion 2019 (14)	YES	PARTIAL YES	NO	PARTIAL YES	YES	YES
Smith 2015 (15)	YES	NO	NO	YES	YES	YES
Wang 2017 (16)	YES	NO	NO	PARTIAL YES	NO	NO
Warren-Galsh 2013 (17)	YES	NO	NO	PARTIAL YES	YES	YES
Willmott 2016 (18)	YES	PARTIAL YES	NO	PARTIAL YES	NO	YES
Mbakaya 2017 (19)	YES	NO	NO	PARTIAL YES	YES	NO
Cowling 2010 (20)	YES	NO	NO	PARTIAL YES	YES	YES
Fong 2020 (21)	YES	NO	YES	PARTIAL YES	YES	NO
MacIntyre 2020 (22)	YES	NO	NO	PARTIAL YES	YES	NO
Singh 2020 (23)	YES	NO	NO	PARTIAL YES	NO	NO
Aeillo 2008 (24)	YES	NO	NO	PARTIAL YES	YES	YES

	7	8	9		10	11		12
Study ID	Did the review authors provide a list of excluded studies and justify the exclusions?	Did the review authors describe the included studies in adequate detail?	Did the review authors use a satisfactory technique for assessing the risk of bias (RoB) in individual studies that were included in the review? (RCT)	Non-randomized studies of intervention (NRSI)	Did the review authors report on the sources of funding for the studies included in the review?	If meta-analysis was performed did the review authors use appropriate methods for statistical combination of results?	Non-randomized studies of intervention (NRSI)	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?
1	NO	YES	Only NRSI	YES	NO	N/A	YES	N/A
2	YES	YES	YES	N/A	YES	YES	N/A	YES
3	NO	YES	YES	N/A	YES	YES	N/A	YES
4	NO	PARTIAL YES	YES	YES	NO	YES	N/A	NO
5	YES	YES	NO	NO	NO	NO	NO	YES
6	NO	YES	YES	YES	NO	N/A	YES	NO
7	YES	PARTIAL YES	YES	N/A	YES	YES	N/A	YES
8	NO	PARTIAL YES	YES	YES	NO	NO	YES	NO
9	NO	PARTIAL YES	PARTIAL YES	YES	NO	YES	YES	YES
10	NO	YES	YES	N/a	NO	YES	N/A	YES
11	NO	NO	NO	NO	NO	NO	NO	NO
12	NO	YES	YES	YES	NO	N/A	N/A	N/A
13	NO	YES	YES	N/A	YES	N/A	N/A	N/A
14	NO	PARTIAL YES	YES	YES	NO	N/A	N/A	N/A
15	YES	YES	YES	N/A	NO	N/A	N/A	N/A
16	NO	PARTIAL YES	YES	YES	NO	N/A	N/A	N/A
17	NO	YES	YES	YES	NO	N/A	N/A	N/A
18	NO	PARTIAL YES	YES	N/A	YES	N/A	N/A	N/A
19	NO	PARTIAL YES	NO	N/A	NO	N/A	N/A	N/A
20	NO	PARTIAL YES	NO	NO	NO	N/A	N/A	N/A
21	NO	PARTIAL YES	N/A	NO	NO	N/A	N/A	N/A
22	NO	PARTIAL YES	NO	N/A	NO	N/A	N/A	N/A
23	NO	YES	NO	NO	NO	N/A	N/A	N/A
24	NO	PARTIAL YES	NO	NO	NO	YES	NO	NO

	13	14	15	16	
Study ID	Did the review authors account for RoB in individual studies when interpreting/ discussing the results of the review?	Did the review authors provide a satisfactory explanation for, and discussion of, any heterogeneity observed in the results of the review?	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?	Did the review authors report any potential sources of conflict of interest, including any funding they received for conducting the review?	AMSTAR GRADE
1	YES	YES	YES	YES	Low
2	YES	YES	NO	YES	Low
3	YES	YES	YES	YES	Critically Low
4	YES	YES	NO	YES	Critically Low
5	YES	YES	YES	YES	Critically Low
6	YES	YES	YES	YES	Critically Low
7	YES	YES	YES	YES	Low
8	NO	NO	NO	YES	Critically Low
9	NO	NO	YES	YES	Critically Low
10	NO	YES	NO	YES	Critically Low
11	YES	NO	NO	YES	Critically Low
12	YES	NO	N/A	YES	Critically Low
13	YES	YES	N/A	YES	Low
14	YES	YES	N/A	YES	Low
15	YES	YES	N/A	NO	Low
16	YES	YES	N/A	YES	Critically Low
17	YES	YES	N/A	YES	Critically Low
18	YES	YES	N/A	YES	Low
19	YES	YES	N/A	YES	Critically Low
20	NO	NO	N/A	YES	Critically Low
21	NO	NO	N/A	YES	Critically Low
22	NO	NO	N/A	YES	Critically Low
23	NO	NO	N/A	YES	Critically Low
24	NO	YES	YES	NO	Critically Low