

Supplementary material

SLR Search strategy

((“monoclonal antibody”[All Fields]) OR (“antiviral agents”[All Fields]) OR (“remdesivir”[All Fields]) OR (“ritonavir”[All Fields]) OR (“molnupiravir”[All Fields]) OR (“ivermectin”[All Fields]) OR (“interferons”[All Fields]) OR (“covid19 convalescent plasma”[All Fields]) OR (“ivig”[All Fields]) OR (“cilgavimab and tixagevimab drug combination” [Supplementary Concept]) OR “tixagevimab” [Supplementary Concept]) OR “cilgavimab” [Supplementary Concept])) AND ((“immunocompromised host”[All Fields]) OR (“rheumatic diseases”[All Fields]) OR (“autoimmune diseases”[All Fields]) OR (“lupus erythematosus, systemic”[All Fields]) OR (“scleroderma, systemic”[All Fields]) OR (“undifferentiated connective tissue diseases”[All Fields]) OR (“mixed connective tissue disease”[All Fields]) OR (“antiphospholipid syndrome”[All Fields]) OR (“polychondritis, relapsing”[All Fields]) OR (“immunoglobulin g4 related disease”[All

Fields]) OR (“myositis”[All Fields]) OR (“Antisynthetase syndrome” [Supplementary Concept]) OR (“sjogrens syndrome”[All Fields]) OR (“ehlers danlos syndrome”[All Fields]) OR (“arthritis, rheumatoid”[All Fields]) OR (“arthritis, psoriatic”[All Fields]) OR (“Polymyalgia Rheumatica”[All Fields]) OR (“systemic vasculitis”[All Fields]) OR (“behcet syndrome”[All Fields])) AND (“COVID-19” OR “COVID-19”[MeSH Terms] OR “COVID-19 Vaccines” OR “COVID-19 Vaccines”[MeSH Terms] OR “COVID-19 serotherapy” OR “COVID-19 serotherapy”[Supplementary Concept] OR “COVID-19 Nucleic Acid Testing” OR “covid-19 nucleic acid testing”[MeSH Terms] OR “COVID-19 Serological Testing” OR “covid-19 serological testing”[MeSH Terms] OR “COVID-19 Testing” OR “covid-19 testing”[MeSH Terms] OR “SARS-CoV-2” OR “sars-cov-2”[MeSH Terms] OR “Severe Acute Respiratory Syndrome Coronavirus 2” OR “NCOV” OR “2019 NCOV” OR (“coronavirus”[MeSH Terms] OR “coronavirus” OR “COV”)))
Only articles published in English will

be included. Studies published between database inception (MEDLINE -1950, EMBASE- 1974) and the date of the searches are run will be sought.

Types of study to be included

Considering the peculiarity of the research question, the SLR included registries, retrospective cohort studies, prospective cohort studies, case series with at least two cases, experimental and quasi experimental studies including clinical trials and open label studies, conference abstract. This review excluded animal studies and review articles.

Condition or domain being studied

- Antiviral drugs and immunotherapy for treating COVID-19
- Immunocompromised conditions (including CTDs patients taking immunosuppressant drugs)

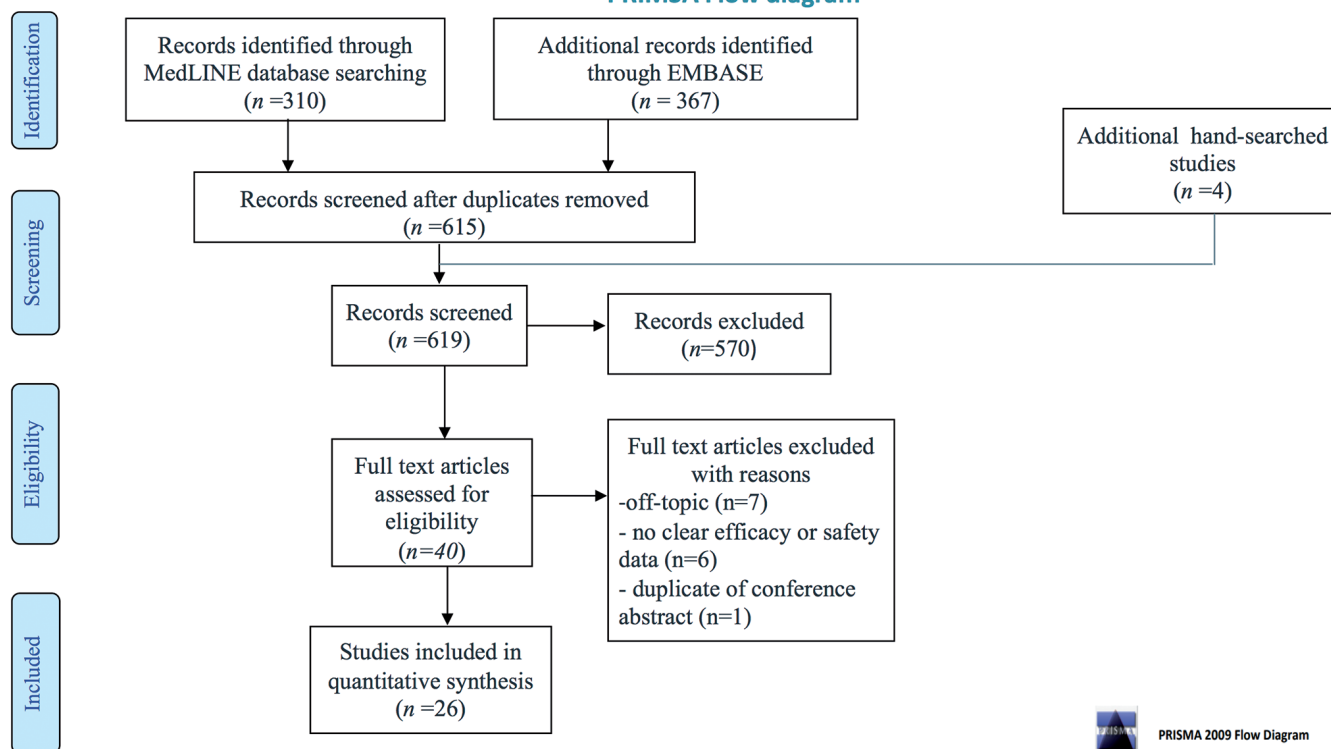
Participants/population

Immunocompromised patients affected by COVID-19

Intervention(s), Exposure(s)

Antiviral drugs and immunotherapy for treating COVID-19

PRISMA Flow diagram



PRISMA 2009 Flow Diagram

Comparison

Absence of antiviral drugs and immunotherapy for treating COVID-19.

Main outcome(s)

Outcome on COVID-19 in these patients
Adverse events

Additional outcomes

Outcome for the specific conditions (only for CTDs).

Data extractions

Data were extracted independently by two reviewers for each disease selected.

Any disagreement was solved through consensus between the two reviewers. However, in case of unresolved disagreements an arbitrator (*Convenor*) was used. Data extraction included first author, title of study, year of publication, study setting (country), participant demographics characteristics (age range, sex distribution, ethnicity), study design/methodology, length of follow-up, type of drug(s) used to treat COVID-19, specific immunocompromised condition (specifying diagnosis for CTDs), immunosuppressive treatment ongoing for the primary disease,

outcome for COVID-19, disease activity for the primary condition. References list from included studies were hand-searched to identify additional potentially relevant studies.

Strategy for data synthesis

Data were collected and organised using Microsoft Excel and statistical analysis was performed with SPSS.