

The Use of Preprints in Health Technology Assessment During SARS-CoV-2 Pandemic

García Carpintero EE¹, Loroño Ortiz G², Imaz Iglesia I³, Granadino Goenechea B¹, Carmona M³, Sánchez Gómez LM.³

¹CSIC (Spanish Council for Scientific Research), Madrid, Spain

²Araba Hospital, Basque Country, Spain

³AETS-ISCI, Health Technology Assessment Agency. Instituto de Salud Carlos III, Madrid, Spain

Correspondence to:

esther.carpintero@cchs.csic.es

OBJECTIVE

To evaluate the use of preprints in the elaboration of Health Technology Assessment (HTA) reports about treatments for severe COVID-19.

METHODOLOGY

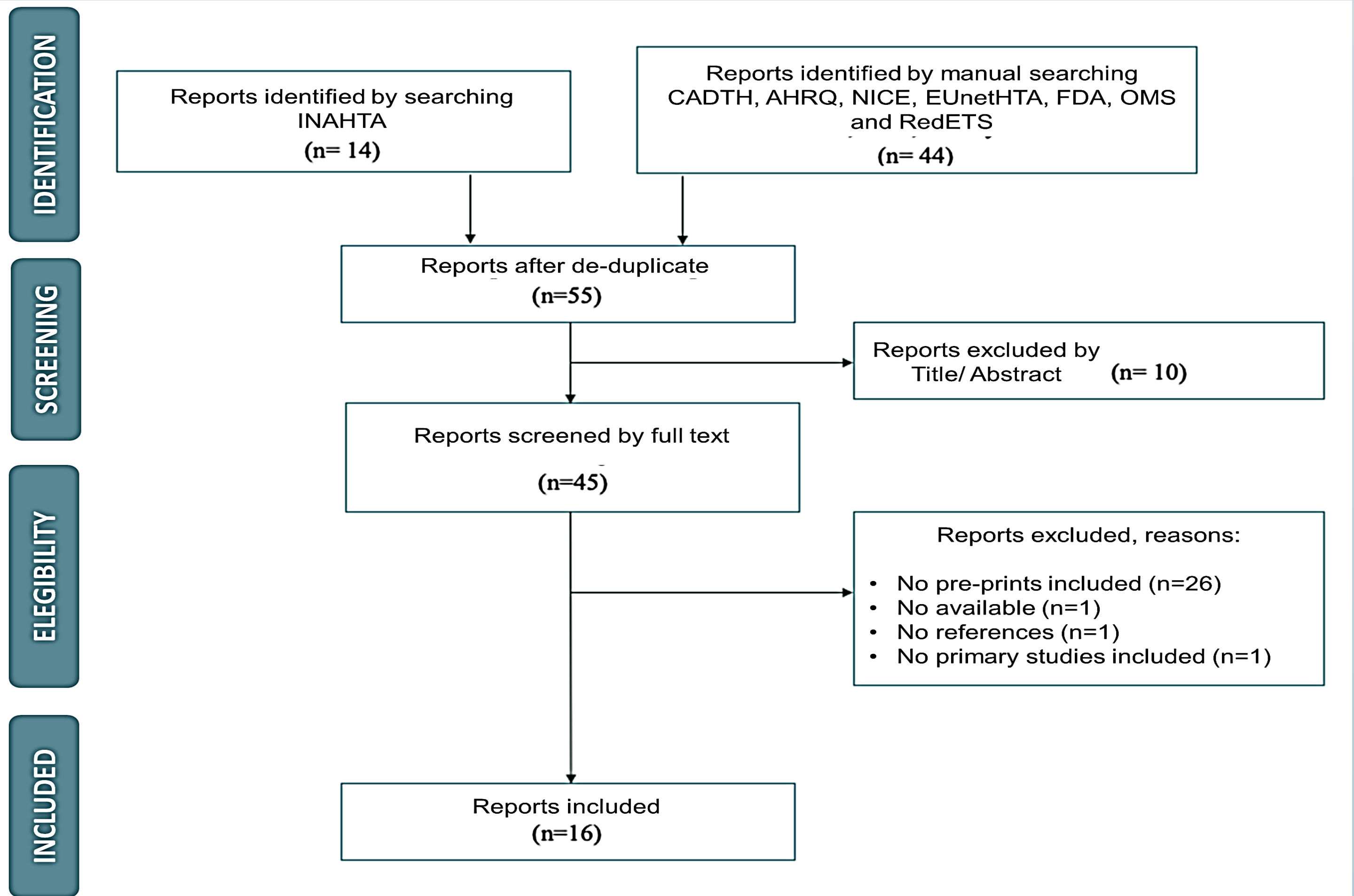
Search was performed in:

- Pubmed
- INAHTA
- CADTH
- NICE
- EUnetHTA
- And others

Inclusion criteria for the HTA reports:

- To analyze efficacy and safety of treatments for severe COVID-19
- Published during 2020.

RESULTS



16 Reports including pre-prints

52 pre-prints included in HTA reports

Pre-prints = 14% included studies

16 TREATMENTS ASSESSED

Favipiravir
Aspirine
Convalescent plasma
Tocilizumab
Camostat
Ivermectine

Ivermectine + doxycycline
Sarilumab
Chloroquine / Hydroxychloroquine
Hydroxychloroquine + Azitromicine
Glucocorticoids

Low molecular weight heparin
Monoclonal antibodies
Interferons
Nоваferon
Lopinavir/ ritonavir

4 FAVOURABLE RECOMMENDATIONS IN HTA REPORTS

Favipiravir
Glucocorticoids
Low molecular weight heparin
Interferons

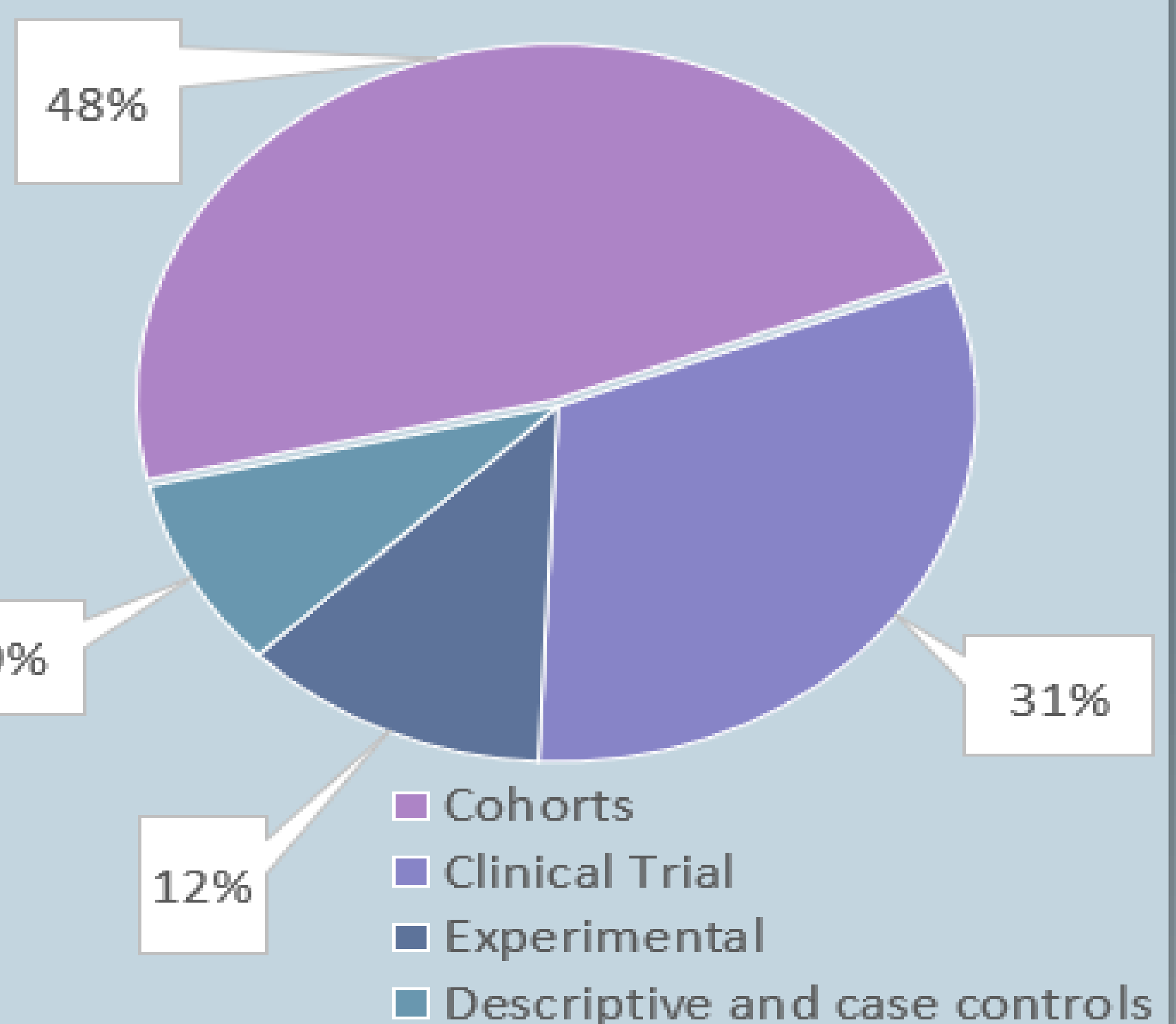
1 CONCLUSION CHANGE AT FINAL PUBLICATION

Chloroquine / Hydroxychloroquine

14 UNPUBLISHED PRE- PRINTS (27%)

Favipiravir
Aspirine
Convalescent plasma
Tocilizumab
Camostat
chloroquine / hydroxychloroquine
Glucocorticoids
Interferons
Nоваferon

Study design of analysed preprints



CONCLUSIONS

Preprints were widely used as body of evidence during the onset of the pandemic in HTA reports on efficacy and safety of treatments for severe COVID-19.

No substantial changes were identified in the pre-prints once they were published in scientific journals.

Unpublished preprints have not been relevant in the final recommendations of HTA reports during the pandemic.

Preprints could be used during the development of HTA report in times of emergency, as a pandemic, but it is necessary to assess the impact on results.