NATIONAL COVID-19 CLINICAL EVIDENCE TASKFORCE

Policy on the use of media statements, preprints and other non-peer-reviewed papers

Version and Date	Version 2, 16 February 2021
Changes from version 1	For preprints, we have removed the step of emailing the corresponding author if the study has not been published within two months of its posting to a preprint server. During 2020 we conducted two rounds of emails to preprint authors following up on publication status but received no responses. To date, preprints not published within two months are typically small studies of treatments listed in the *'Disease-modifying treatments not recommended outside of clinical trials'* section of the guideline. If we have specific concerns about these studies, these are made explicit in the Summary text for that recommendation. Preprints of studies that contribute the majority of evidence for recommendations that inform clinical care (e.g. RECOVERY trial, WHO Solidarity trial) all tend to be published within 4-10 weeks of being posted to preprint servers.

A notable feature of the coronavirus pandemic has been the rapid acceleration in the dissemination of study results, especially preprint papers [1]. Researchers are sharing preliminary findings on preprint servers at unprecedented rates: by one estimate, around a quarter of the 16,000 scientific articles on COVID-19 in the first four months of the pandemic were hosted on preprint servers [2]. We have also seen investigators of high-profile trials, such as the UK RECOVERY Trial and the NIH-funded Adaptive COVID-19 Treatment Trial, issue press statements providing preliminary findings ahead of full publication of the data.

As a living guideline in an area of fast-moving research, timeliness in formulating and updating recommendations is critical to guide current clinical care and management of COVID-19. Our policy on the use of preliminary results from non-peer-reviewed publications to inform recommendations thus aims to balance the benefits to clinicians, patients and society from early access to important research findings which may change clinical practice with variable data provenance, transparency and completeness of reporting across these formats. The presence of sufficient information to extract data and conduct a robust quality appraisal of the study is crucial.

Media statements

Results reported solely in media statements (press releases) do not contain sufficient information to enable rigorous appraisal and are not considered for evidence review by the Taskforce. We may note in the relevant section of the guideline that a press

statement has been issued and that we are awaiting publication of more complete results before considering the evidence further.

Abstracts
Although abstracts (also referred to as conference abstracts) may provide more information and data than media statements, they typically do not provide sufficient information to allow adequate quality appraisal. Results reported solely as abstracts are not considered for evidence review by the Taskforce. We may note in the relevant section of the guideline that an abstract has been published and that we are awaiting publication of more complete results before considering the evidence further.

Preprints
We define a preprint as a complete and public draft of a scientific document, yet to be certified by peer review. Typically, they are made publicly available on preprint servers (e.g. medRxiv, bioRxiv) before, or in parallel with, submission to a journal. F1000 uses a 'post-publication peer review' model. Papers published there that are awaiting peer review are considered equivalent to preprint papers.

Preprints are recognised as a valid form of publication. For example, the Wellcome Trust allows researchers to cite preprints in grant applications and end-of-grant review reports. A recent study (available as a preprint) reports a small difference in the completeness of reporting of preprints compared to peer-reviewed versions of the articles and other peer-reviewed articles [3]. Although relatively under-utilised in medicine to date, the use of preprints as a common method of scholarly communication is well established in many other fields of science.

Results reported in preprints are considered sufficient to inform recommendations, provided that a robust assessment of the methods and results are possible, in particular the extraction of outcomes and adequate information to allow a risk of bias assessment. Taskforce panels need to take into consideration the inclusion of preprint papers when determining the strength and direction of recommendations, for example making a conditional rather than strong recommendation, or downgrading the certainty of evidence in the GRADE evidence profile. Panels should also take account of other factors, such as access to the study protocol and/or statistical analysis plan, when assessing the reliability of the results in a preprint paper (as with peer-reviewed articles).

As soon as the peer-reviewed version of a preprint paper is published, the Taskforce check the data and risk of bias assessment. If there are changes between the preprint and peer-reviewed versions that impact the certainty of the evidence, provide new relevant information, or change previously reported effect estimates, the revised evidence will be presented to the relevant panel and a decision made as to whether an update of the recommendation is warranted.

Once the information from the peer-reviewed paper has been incorporated into the guideline and approved by the relevant panel, the citation to the preprint paper is replaced with the citation to the peer-reviewed publication.

Where studies published only as preprints are used to inform recommendations, the Taskforce will clearly state this in the Summary text for the recommendation. To ensure the Taskforce is aware when the peer-review version of the preprint paper is published we maintain alerts in PubMed, in addition to our standard evidence surveillance processes.

Other pre-published information
The Taskforce has links to several well-established and respected groups internationally who are conducting evidence syntheses (systematic reviews, evidence summaries, rapid guidance) relevant to the scope of the guideline. These groups are often willing to share

pre-publication versions of papers and guidance with us. The Taskforce may use the information from these syntheses (following our standard assessment processes) to formulate recommendations, particularly for PICOs that are informed by evidence other than from randomised trials. When we use syntheses from other groups, this is clearly stated in the Summary text for the recommendation.

References

[1] Callaway C. Will the pandemic permanently alter scientific publishing? Nature 2020 582:167-8. doi: 10.1038/d41586-020-01520-4

[2] Fraser N, Brierley L, Dey G, Polka JK, Coates JA. Preprinting a pandemic: the role of preprints in the COVID-19 pandemic. bioRxiv 2020.05.22.111294; doi: https://doi.org/10.1101/2020.05.22.111294

[3] Carneiro CFD, Queiroz VGS, Moulin TC, Carvalho CAM, Haas CB, Rayêe D, et al. Comparing quality of reporting between preprints and peer-reviewed articles in the biomedical literature. bioRxiv. 2020:581892; doi: https://doi.org/10.1101/581892