

# Guidelines Development

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*Last Updated: February 29, 2024*

The COVID-19 Treatment Guidelines were developed in response to the COVID-19 Public Health Emergency declared by the U.S. Department of Health and Human Services in late January 2020. The goal of the Guidelines was to provide clinicians with guidance on caring for patients with COVID-19. Because clinical information about the optimal management of COVID-19 evolved quickly, a multidisciplinary panel of experts frequently updated the Guidelines based on their assessments of the emerging evidence on treatments for this disease.

## Panel Composition

The COVID-19 Treatment Guidelines Panel (the Panel) co-chairs appointed Panel members with clinical experience and expertise in adult or pediatric patient management, translational and clinical science, or the development of treatment guidelines. Panel members included representatives from federal agencies, health care organizations, academic institutions, professional societies, and the community. Federal agencies and professional societies represented on the Panel include:

- American Association for Respiratory Care
- American Association of Critical-Care Nurses
- American College of Chest Physicians
- American College of Emergency Physicians
- American College of Obstetricians and Gynecologists
- American Society of Hematology
- American Thoracic Society
- Biomedical Advanced Research and Development Authority
- Centers for Disease Control and Prevention
- Department of Defense
- Department of Veterans Affairs
- Food and Drug Administration
- Infectious Diseases Society of America
- National Institutes of Health
- Pediatric Infectious Diseases Society
- Society of Critical Care Medicine
- Society of Infectious Diseases Pharmacists

The inclusion of representatives from professional societies does not imply that these societies endorsed all elements of the Guidelines.

[Appendix A, Table 1](#), provides the names and affiliations of the Panel members, ex officio members, consultants, and support team members on the Panel roster as of the final update of the Guidelines. Financial disclosures for the Panel members can be found in [Appendix A, Table 2](#).

# Development of the Guidelines

Each section of the Guidelines was developed by a working group of Panel members who had expertise in the area addressed in that section. Each working group was responsible for identifying relevant information and published scientific literature and for conducting a systematic, comprehensive review of that information and literature. The working groups proposed updates to the Guidelines based on the latest published research findings and clinical information.

Voting members of the Panel reviewed and voted on new Guidelines sections and recommendations. A majority of voting members endorsed each recommendation statement before it was included in the Guidelines. This requirement applied to recommendations for and against treatments and in cases when there was insufficient evidence to recommend either for or against treatments. Section updates that did not affect rated recommendations were approved by the Panel co-chairs without a Panel vote. During the development of the Guidelines, Panel members were required to keep all Panel deliberations and evaluations of unpublished data confidential.

## Method of Synthesizing Data and Formulating Recommendations

The working groups critically reviewed and synthesized the available data to develop recommendations. During this process, the Panel evaluated the data, including the source of the data, the type of study (e.g., randomized controlled trial, prospective or retrospective cohort study, case series, in vitro study), the quality and suitability of the methods, the number of participants, and the effect sizes observed. In addition to evaluating data and reviewing clinical research on COVID-19, Panel members used clinical experiences with COVID-19 and other diseases to develop recommendations.

The recommendations in these Guidelines are based on scientific evidence and expert opinion. Each recommendation includes 2 ratings: an uppercase letter (**A**, **B**, or **C**) that indicates the strength of the recommendation and a Roman numeral with or without a lowercase letter (**I**, **IIa**, **IIb**, or **III**) that indicates the quality of the evidence that supports the recommendation (see Table 1).

The ratings for the quality of the evidence reflect both the likelihood of bias in the treatment effect estimate and the precision of the estimate. A rating of **I** corresponds to a low likelihood of bias and a high precision, a rating of **IIa** (for randomized trials) or **IIb** (for observational studies) corresponds to a moderate likelihood of bias and a moderate or high precision, and a rating of **III** corresponds to a high likelihood of bias (for any type of study).

Table 1. Recommendation Rating Scheme

Strength of Recommendation	Evidence for Recommendation
<b>A:</b> Strong recommendation for the statement <b>B:</b> Moderate recommendation for the statement <b>C:</b> Weak recommendation for the statement	<b>I:</b> <i>High quality of evidence:</i> 1 or more randomized trials without major limitations, <sup>a</sup> well-powered subgroup analyses of such trials, or meta-analyses without major limitations <b>IIa:</b> <i>Moderate quality of evidence:</i> Randomized trials and subgroup analyses of randomized trials that do not meet the criteria for a <b>I</b> rating <b>IIb:</b> <i>Moderate quality of evidence:</i> Observational studies without major limitations <sup>b</sup> <b>III:</b> Expert opinion
<sup>a</sup> The rating may be lower than <b>I</b> in cases where trials have produced conflicting results.	
<sup>b</sup> This category also includes meta-analyses of observational studies.	

In general, the recommendations in these Guidelines fall into the following categories:

- **The Panel recommends using [blank] for the treatment of COVID-19 (rating).**  
Recommendations in this category are based on evidence that the potential benefits of using the intervention outweigh the potential risks.
- **There is insufficient evidence for the Panel to recommend either for or against the use of [blank] for the treatment of COVID-19 (no rating).** This statement is used when data are not sufficient to support a recommendation or when the available data are conflicting.
- **The Panel recommends against the use of [blank] for the treatment of COVID-19, except in a clinical trial (rating).** This recommendation is used in cases when the available data have shown no benefit from using the intervention for the treatment of COVID-19, or the intervention has demonstrated safety concerns. More results from clinical trials are needed to further define the role of the intervention in treating COVID-19.
- **The Panel recommends against the use of [blank] for the treatment of COVID-19 (rating).**  
This recommendation is used in cases when the available data show no benefit from using the intervention to treat COVID-19, or the safety concerns for the intervention outweigh any potential benefits.

## Evolving Knowledge on Treatments for COVID-19

The Food and Drug Administration approved several agents (e.g., baricitinib, ritonavir-boosted nirmatrelvir [Paxlovid], remdesivir, tocilizumab) for the treatment of COVID-19, and a number of other agents have received Emergency Use Authorizations. An array of drugs approved for other indications and multiple investigational agents are being studied for the treatment of COVID-19 in clinical trials around the globe. Information about these trials can be found at [ClinicalTrials.gov](https://clinicaltrials.gov).

Whenever possible, the Panel recommends that unapproved or unlicensed treatments for COVID-19 be studied in well-designed, controlled clinical trials. This recommendation also applies to drugs that have been approved or licensed for indications other than the treatment of COVID-19. Clinical research is critically important to generating evidence that can be used to answer questions about the safety and efficacy of potential treatments for COVID-19.

Finally, it is important to stress that the rated treatment recommendations in these Guidelines should not be considered mandates. Ultimately, patients and their health care providers should use a shared decision-making process when considering treatments for COVID-19.