

Considerations for Using Concomitant Medications in Patients With COVID-19

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Summary Recommendations
<ul style="list-style-type: none">Patients with COVID-19 who are receiving concomitant medications (e.g., angiotensin-converting enzyme [ACE] inhibitors, angiotensin receptor blockers [ARBs], HMG-CoA reductase inhibitors [statins], systemic or inhaled corticosteroids, nonsteroidal anti-inflammatory drugs, acid-suppressive therapy) for underlying medical conditions should not discontinue ACE inhibitors and ARBs (AIIa) or other medications (AIII) unless discontinuation is otherwise warranted by their clinical condition.The COVID-19 Treatment Guidelines Panel recommends against using medications off-label to treat COVID-19 if they have not been shown to be safe and effective for this indication in a clinical trial (AIII).
Each recommendation in the Guidelines receives a rating for the strength of the recommendation (A, B, or C) and a rating for the evidence that supports it (I, IIa, IIb, or III). See Guidelines Development for more information.

Individuals with underlying medical conditions, such as cardiovascular disease, pulmonary disease, diabetes, and malignancy, and those who receive chronic immunosuppressive therapy are at higher risk of severe illness with COVID-19. These patients are often prescribed medications to treat their underlying medical conditions.

Early in the pandemic, some of these medications, such as angiotensin-converting enzyme (ACE) inhibitors, angiotensin receptor blockers (ARBs),¹ HMG-CoA reductase inhibitors (statins),^{2,3} and histamine-2 receptor antagonists,⁴ were hypothesized to offer potential as COVID-19 therapeutic agents. Others, such as nonsteroidal anti-inflammatory agents, were postulated to have negative impacts.⁵ Currently, there is no evidence that discontinuing medication for underlying medical conditions offers a clinical benefit for patients with COVID-19.⁶⁻⁸ For example, the Food and Drug Administration stated that there is no evidence linking the use of nonsteroidal anti-inflammatory agents with worsening of COVID-19 and advised patients to use them as directed.⁹ Additionally, the American Heart Association, the Heart Failure Society of America, and the American College of Cardiology issued a joint statement that renin-angiotensin-aldosterone system antagonists, such as ACE inhibitors and ARBs, should be continued as prescribed in those with COVID-19.¹⁰

Therefore, patients with COVID-19 who are treated with concomitant medications for an underlying medical condition **should not discontinue** ACE inhibitors and ARBs (**AIIa**) or other medications (**AIII**) unless discontinuation is otherwise warranted by their clinical condition. For patients with COVID-19 who require nebulized medications, precautions should be taken to minimize the potential for transmission of SARS-CoV-2 in the home and in health care settings.^{11,12}

The COVID-19 Treatment Guidelines Panel **recommends against** using medications off-label to treat COVID-19 if they have not been shown to be safe and effective for this indication in a clinical trial (**AIII**). Clinicians should refer to the [Therapies](#) section of the Guidelines for information on the medications that have been studied as potential therapeutic options for patients with COVID-19.

When prescribing medications to treat COVID-19, clinicians should always assess the patient's current medications for potential drug-drug interactions and additive adverse effects. The decision to continue or change a patient's medications should be individualized based on their specific clinical condition. Clinicians can refer to product labels and visit the [Liverpool COVID-19 Drug Interactions](#) website for guidance on identifying and managing drug-drug interactions. It is also worth noting that

ritonavir-boosted nirmatrelvir (Paxlovid), which is approved by the Food and Drug Administration for the treatment of mild to moderate COVID-19 in adults who are at high risk of progressing to severe COVID-19, has significant drug-drug interactions. See [Drug-Drug Interactions Between Ritonavir-Boosted Nirmatrelvir \(Paxlovid\) and Concomitant Medications](#) for more information.

References

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