Prioritization of Anti-SARS-CoV-2 Therapies for the Treatment of COVID-19 in Nonhospitalized Patients When There Are Logistical Constraints

Last Updated: December 1, 2022

The prioritization guidance in this section should be used only when logistical constraints limit the availability of therapies. When there are no logistical constraints, the COVID-19 Treatment Guidelines Panel (the Panel) recommends that therapies for treatment of SARS-CoV-2 be prescribed for any eligible individual as recommended in these Guidelines.

When it is necessary to triage patients for receipt of anti-SARS-CoV-2 therapies, the Panel suggests prioritizing individuals with clinical risk factors for severe illness who are unvaccinated or vaccinated but not up to date on their vaccinations and individuals who are not expected to mount an adequate immune response (see Immunocompromising Conditions below).

Prioritization schemes should include a plan for equitable distribution of scarce resources to individuals who may have less knowledge of or access to these therapies. The availability and distribution of recommended therapies should be monitored to ensure that access to products is equitable.

Patient Prioritization for Treatment

The Panel recommends oral ritonavir-boosted nirmatrelvir (Paxlovid) as treatment for nonhospitalized patients with mild to moderate COVID-19 who are at high risk of progressing to severe disease (AIIa).

Remdesivir is a recommended option if ritonavir-boosted nirmatrelvir cannot be used. However, some treating facilities may not have the ability to provide a 3-day course of remdesivir intravenous infusions to all eligible patients. In these situations, prioritizing patients who will benefit the most from the therapy becomes necessary. If administration of remdesivir is not feasible, clinicians should review the Panel’s latest recommendations for an alternative treatment option.

The prioritization scheme below is based on 4 key elements: age, vaccination status, immune status, and clinical risk factors. For a list of risk factors, see the Centers for Disease Control and Prevention (CDC) webpage Underlying Medical Conditions Associated With Higher Risk for Severe COVID-19. The groups are listed by tier in descending order of priority.

<table>
<thead>
<tr>
<th>Tier</th>
<th>Risk Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>• Immunocompromised individuals not expected to mount an adequate immune response to COVID-19 vaccination or SARS-CoV-2 infection due to their underlying conditions, regardless of vaccine status (see Immunocompromising Conditions below); or • Unvaccinated individuals at the highest risk of severe disease (anyone aged ≥75 years or anyone aged ≥65 years with additional risk factors).</td>
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<tr>
<td>2</td>
<td>• Unvaccinated individuals not included in Tier 1 who are at risk of severe disease (anyone aged ≥65 years or anyone aged &lt;65 years with clinical risk factors)</td>
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</tbody>
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| 3    | • Vaccinated individuals at risk of severe disease (anyone aged ≥65 years or anyone aged <65 years with clinical risk factors)  
**Note:** Vaccinated individuals who are not up to date with their immunizations are likely at higher risk for severe disease; patients within this tier who are in this situation should be prioritized for treatment. |

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Immunocompromising Conditions

The CDC website COVID-19 Vaccines for People Who Are Moderately or Severely Immunocompromised provides a list of moderate or severe immunocompromising conditions.¹

If remdesivir cannot be provided to all individuals who are moderately to severely immunocompromised and not able to receive ritonavir-boosted nirmatrelvir, the Panel suggests prioritizing patients who are least likely to mount an adequate response to COVID-19 vaccination or SARS-CoV-2 infection and are at risk for severe outcomes, including, but not limited to, patients who:

- Are receiving active treatment for solid tumor and hematologic malignancies.
- Have a hematologic malignancy (e.g., chronic lymphocytic leukemia, non-Hodgkin lymphoma, multiple myeloma, acute leukemia) that has been associated with poor response to COVID-19 vaccines, regardless of the patient’s current treatment.
- Received a solid organ or islet transplant and are receiving immunosuppressive therapy.
- Received chimeric antigen receptor T cell (CAR T-cell) therapy or a hematopoietic cell transplant (HCT) and are within 2 years of transplantation or are receiving immunosuppressive therapy.
- Have a moderate or severe primary immunodeficiency (e.g., severe combined immunodeficiency, DiGeorge syndrome, Wiskott-Aldrich syndrome, common variable immunodeficiency disease).
- Have advanced or untreated HIV infection (defined as people with HIV and CD4 T lymphocyte [CD4] cell counts <200 cells/mm³, a history of an AIDS-defining illness without immune reconstitution, or clinical manifestations of symptomatic HIV).
- Are receiving active treatment with high-dose corticosteroids (i.e., ≥20 mg prednisone or equivalent per day when administered for ≥2 weeks), alkylating agents, antimetabolites, transplant-related immunosuppressive drugs, cancer chemotherapeutic agents classified as severely immunosuppressive, or immunosuppressive or immunomodulatory biologic agents (e.g., B cell-depleting agents).

If logistical constraints preclude administration of remdesivir to all prioritized patients, the Panel suggests further prioritizing patients who are more severely immunocompromised and have additional risk factors for severe disease.

Clinical Risk Factors

Some of the most important risk factors for severe COVID-19 include age (risk increases with each decade after age 50),² receiving cancer treatment, immunocompromising conditions or receipt of immunosuppressive medications, cardiovascular disease, chronic kidney disease, chronic lung disease, diabetes, obesity (i.e., body mass index ≥30), and pregnancy. For a complete list of risk factors, including information on the relative risk of severe disease, see the CDC webpage Underlying Medical Conditions Associated With Higher Risk for Severe COVID-19. Of note, the likelihood of developing severe COVID-19 increases when a person has multiple comorbidities.³ For people who are not immunocompromised, vaccination with a primary COVID-19 vaccine series and booster doses dramatically reduces the risk of progression to severe disease.

Although data on risk factors for severe COVID-19 in children are limited, there is substantial overlap between risk factors in children and those identified in adults. Children aged <1 year or children with obesity, moderate to severe immunosuppression, or complex chronic disease and medical complexity and dependence on respiratory technology are at substantially increased risk of severe disease.⁴
References


