

Bamlanivimab in COVID-19- Nursing Education

The U.S. FDA has issued an Emergency Use Authorization (EUA) to allow for use of the unapproved product **bamlanivimab** for treatment of mild to moderate COVID-19 in non-hospitalized adults. Due to limited medication supply, patients being considered for bamlanivimab should meet **all of the following criteria**:

- I. **Authorized use criteria** (*Patients must meet all of the following criteria*)
 - a. Non-hospitalized
 - b. Confirmed SARS-CoV-2 positive (must be first positive test)
 - c. ≤7 days from initial symptom onset
 - d. Age ≥18 years
 - e. Weight ≥40kg
 - f. Pneumonia Severity Index Score (PSI) < 80
 - g. High risk for progressing to severe COVID-19 and/or hospitalization (Must meet ≥1 criteria below)

General risk factors:
<ul style="list-style-type: none">• BMI ≥35 <i>OR</i>• Chronic kidney disease <i>OR</i>• Diabetes <i>OR</i>• Age ≥65 <i>OR</i>

Immunosuppressive/high risk disease:
<ul style="list-style-type: none">• HIV infection with CD4 count ≤200 <i>OR</i>• Solid organ or stem cell transplant <i>OR</i>• Sickle cell disease

Age ≥55 AND one of the following:
<ul style="list-style-type: none">• Cardiovascular disease <i>OR</i>• Hypertension <i>OR</i>• COPD <i>OR</i>• Other chronic respiratory illness

Receiving immunosuppressive treatment:
<ul style="list-style-type: none">• Chemotherapy in the past year <i>OR</i>• Immunosuppressant use for autoimmune disease <i>OR</i>• Prednisone ≥20 mg/day (or equivalent) for ≥14 days

- II. **Limitations of Authorized Use**
 - a. Bamlanivimab is not authorized for use in patients:
 - i. Who are hospitalized due to COVID-19, *OR*
 - ii. Who require oxygen therapy due to COVID-19, *OR*
 - iii. Who require an increase in baseline oxygen flow rate due to COVID-19 in those on chronic oxygen therapy due to underlying non-COVID-19 related comorbidity.
 - b. Benefit of treatment with bamlanivimab has not been observed in patients hospitalized due to COVID-19. Monoclonal antibodies, such as bamlanivimab, may be associated with worse clinical outcomes when administered to hospitalized patients with COVID-19 requiring high flow oxygen or mechanical ventilation.
- III. **Dose:** Single intravenous (IV) infusion of 700 mg over at least 60 minutes
- IV. **Contraindications:** None
- V. **Monitoring**
 - a. No laboratory monitoring indicated
 - b. Clinical monitoring for 60 minutes post infusion
- VI. **Adverse Effects and Precautions**
 - a. Symptoms including nausea, diarrhea, dizziness, headache, pruritus, and vomiting were observed in clinical trials, though at rates comparable to placebo.
 - b. Potential for serious hypersensitivity reaction, including anaphylaxis or infusion related reactions
 - i. Signs and symptoms of infusion reactions may include: fever, chills, nausea, headache, bronchospasm, hypotension, angioedema, throat irritation, rash including urticaria, pruritus, myalgia, dizziness.

- ii. If an infusion reaction occurs, stop drug infusion and contact provider for further instructions.
- iii. If anaphylaxis occurs, standard protocol should be followed

VII. Restrictions, Approvals, and Ordering

- a. The EUA Fact Sheet should be provided to the patient and/or caregiver and documentation that it was reviewed should be placed in the clinical record.
- b. Medication errors and/or serious adverse events should be reported to the OLOL Main Pharmacy. They will assist with submitting the required FDA Medwatch reports within 7 days of event.

VIII. Obtaining the medication

- a. After patients have confirmed desire to receive bamlanivimab and the provider/pharmacy have confirmed that the patient meets appropriate criteria, please request the dose from pharmacy.

IX. Administration

- a. Pharmacy will spike and prime the medication using a Polyvinylchloride (PVC) infusion set containing a 0.20/0.22 micron in-line polyethersulfone (PES) filter.
- b. Administer the infusion solution via pump at a rate of 200mL/hr (over 60 minutes).
- c. Clinically monitor patients during administration for signs of infusion reactions (listed above).
- d. If an infusion-related reaction occurs, consider slowing or stopping the infusion and administer appropriate medications and/or supportive care.
- e. Once infusion is complete, flush the infusion line to ensure delivery of the required dose.
- f. Discard unused product.
- g. Clinically monitor patients for at least 1 hour after infusion is complete.