Consideration for the Initiation of Casirivimab + Imdevimab in COVID-19 Ambulatory/Outpatients

For non-hospitalized adult patients (≥18 years old) with symptomatic mild-to-moderate COVID-19, **casirivimab + imdevimab** may be considered, as authorized by Emergency Use Authorization (EUA) by the Food and Drug Administration (FDA) [revised] 06/2021. **However, specific high-risk criteria are not required for use and can be prescribed at physician discretion.**

I. **Specific high-risk criteria are not required for use.**

II. **Evidence of the below creating High Risk from original EUA:**
   a. Non-hospitalized
   b. ≤7 days from initial symptom onset
   c. Age ≥18 years
   d. Weight ≥40kg
   e. High risk for progressing to severe COVID-19 and/or hospitalization (Must meet ≥1 criteria below)

- BMI ≥25
- Chronic kidney disease
- Diabetes
- Age ≥65
- Pregnancy
- Cardiovascular disease
- Hypertension
- COPD
- Other chronic respiratory illness
- HIV infection with CD4 count ≤200
- Solid organ or stem cell transplant
- Sickle cell disease
- Chemotherapy in the past year
- Immunosuppressant use for autoimmune disease
- Prednisone ≥20 mg/day (or equivalent) for ≥14 days
- Neurodevelopmental disorder
- Medical-related technological dependence (ex: trach, PEG)

**Additional high-risk conditions qualify at the discretion of covering physician

III. **Limitations of Authorized Use**
   a. Casirivimab + imdevimab 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 casirivimab + imdevimab has not been observed in patients hospitalized due to COVID-19. Monoclonal antibodies, such as casirivimab + imdevimab**,** may be associated with worse clinical outcomes when administered to hospitalized patients with COVID-19 requiring high flow oxygen or mechanical ventilation.

IV. **Dose:** Single intravenous (IV) infusion of 600 mg/600mg over at least 20 minutes

V. **Contraindications:** None

VI. **Monitoring:**
   a. No laboratory monitoring indicated
   b. Clinical monitoring for 60 minutes post infusion

VII. **Special considerations:**

a. In patients who have received the first COVID-19 vaccine dose, casirivimab + imdevimab can still be given.
b. The second COVID-19 vaccine dose should be delayed for at least 90 days after receiving casirivimab + imdevimab to avoid potential interference of the antibody therapy with vaccine-induced immune responses.

VIII. **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

IX. **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.

X. **Obtaining the medication**

a. After patients have patients have confirmed desire to receive casirivimab + imdevimab and the provider/pharmacy have confirmed that the patient meets appropriate criteria, the dose can be requested from pharmacy.

XI. **Administration**

a. 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 310mL/hr. (over 21 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.

Consideration for the Initiation of Casirivimab + Imdevimab in COVID-19 Inpatients

For hospitalized adult patients (≥18 years old) with symptomatic COVID-19, **casirivimab 600 mg + imdevimab 600 mg** may be considered for inpatient utilization based off results from the RECOVERY trial.[43] Trial results demonstrated that addition of the combination of 2 monoclonal antibodies to usual care resulted in a statistically significant improvement in mortality in **seronegative** patients at baseline. Allocation to the therapy arm was also associated with a lower risk of progression to mechanical ventilation. As a result, the FMOLHS System Task Force has agreed to addition of **casirivimab 600 mg + imdevimab 600 mg** to inpatient therapeutic regimen where indicated.

I. **Indications for use**
   a. Hospitalized COVID-19 positive patients
   b. **Seronegative** status (Lack of SARS-CoV2 IgG or IgM)
   c. Age ≥18 years

II. **Dose:** Single intravenous (IV) infusion of 600 mg/600mg over at least 20 minutes

III. **Contraindications:** None

IV. **Monitoring:**
   a. No laboratory monitoring indicated
   b. Clinical monitoring for 60 minutes post infusion

V. **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

VI. **Restrictions, Approvals, and Ordering:**
   a. Medication errors and/or serious adverse events should be reported to the Main Pharmacy. They will assist with submitting the required FDA Medwatch reports within 7 days of event.

VII. **Administration**
   a. 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 310mL/hr (over 21 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.