UAMS Outpatient Targeted Treatment Considerations for Adult Patients with COVID-19 Infections *(updated 12/30/2020)*

Clinical data on potential therapies for COVID-19 infections are severely limited. Therapies referenced in this document should be used with caution and consideration of potential benefits and harms should be measured prior to individual use. The U.S. Food and Drug Administration (FDA) has issued an Emergency Use Authorization (EUA) to permit the emergency use of bamlanivimab on 11/10/2020 and casirivimab/imdevimab on 11/21/2020 to treat outpatients with COVID-19 infection.

Treatment options by disease classification for outpatients with COVID-19 infections (see table for dosing).

1. **Asymptomatic Infection**:
   Outpatients with no symptoms consistent with viral infection
   a. Supportive Care

2. **Mild/Moderate Infection**:
   Outpatients with ≥1 of the following symptoms: Fever ≥100.4F, Cough, Sore Throat, Malaise, Headache, Muscle Pain, GI Symptoms, Shortness of Breath, Loss of taste/smell
   a. Consider Bamlanivimab if at high risk of developing severe disease (see below)
   b. Consider Casirivimab/Imdevimab if at high risk of developing severe disease (see below)

***HIGH RISK criteria for adult outpatients with COVID-19 infection for developing severe or critical disease (must meet ≥1 of the following to be HIGH RISK):**

1. Age ≥ 65yo
2. Body Mass Index (BMI) ≥ 35
3. Chronic Kidney Disease (stage III or higher)
4. Diabetes
5. Be either immunosuppressed or on an immunosuppressive treatment
6. Age ≥ 55yo **AND** have one of the following (cardiovascular disease, hypertension, chronic obstructive pulmonary disease (COPD), or other chronic respiratory disease)

Drug	Inclusion Criteria for Use	Exclusion Criteria for Use	Data
Bamlanivimab <u>Dose for adult >40kg:</u> - 700mg IV x1 - 60min monitored infusion - Additional 60min post-infusion monitoring <u>Unknown safety populations:</u> 1. Mod/Sev Hepatic disease 2. Pregnancy	1. Positive SARS-CoV-2 PCR or Antigen test 2. Adult ≥ 18yo 3. Have Mild/Moderate symptomatic infection (listed above) 4. Be HIGH RISK for severe disease (listed above) 5. Acute illness with symptom onset ≤ 10d (preferred for symptom ≤ 7d)	1. <18 yo (Refer to Arkansas Children's Hospital) 2. Inpatient status 3. Asymptomatic infection 4. New oxygen requirement due to COVID-19 5. Increase in oxygen requirement from baseline requirement due to COVID-19 6. Positive SARS-CoV-2 serology test in prior 4 weeks	COVID-19 Clinical Data: 1. Chen et al (NEJM 10/28/20; Interim Analysis): - 309 (700mg, 2800, 7000) vs 143 placebo - 2800mg: Decrease log VL by 0.53 vs placebo (p=0.02). Other doses, no difference. - Symptom score decreased 0.79 points by day 6 (95% CI -1.35 to -0.23) - ER/Hospitalization at any dose: *1.6% vs 6.3% **(p=.008)** *Age ≥65 OR BMI ≥35; 4.2% vs 14.6% **(p=.028)**
Casirivimab/Imdevimab <u>Dose for adult >40kg:</u> - 1200mg/1200mg IV x1 - 60min monitored infusion - Additional 60min post-infusion monitoring <u>Unknown safety populations:</u> 1. Mod/Sev Hepatic disease 2. Pregnancy or breastfeeding	1. Positive SARS-CoV-2 PCR or Antigen test 2. Adult ≥ 18yo 3. Have Mild/Moderate symptomatic infection (listed above) 4. Be HIGH RISK for severe disease (listed above) 5. Acute illness with symptom onset ≤ 10d (preferred for symptom ≤ 7d)	1. <18 yo (Refer to Arkansas Children's Hospital) 2. Inpatient status 3. Asymptomatic infection 4. New oxygen requirement due to COVID-19 5. Increase in oxygen requirement from baseline requirement due to COVID-19 6. Positive SARS-CoV-2 serology test in prior 4 weeks	COVID-19 Clinical Data: 1. FDA EUA fact sheet: - 533 (2400mg or 8000mg) vs placebo 266 - 7d decrease log VL by 0.36 vs placebo (p<0.0001). No difference on 1d and 11d VL. - Symptom score decreased 0.79 points by day 6 (95% CI -1.35 to -0.23) - 28d ER/Hospitalization at either dose: *1.8% vs 4.3% (p=0.06) *High Risk (as above): 2.7% vs 9.0% **(p=0.035)**