Monoclonal Antibody Administration (Optional)

Purpose: To allow for paramedics to administer monoclonal antibodies with an order from a physician or other authorized prescriber.

I. Verify that the patient meets screening criteria
   A. Must be all of the following
      i. ≥ 18 years old
      ii. ≥ least 40 kilograms
      iii. Having mild to moderate COVID-19; high risk for progressing to severe COVID-19 and/or hospitalization
   B. Must be at least one of the following
      i. Has a body mass index (BMI) ≥ 35
      ii. Has chronic kidney disease
      iii. Has diabetes
      iv. Has immunosuppressive disease
      v. Is currently receiving immunosuppressive treatment
      vi. Is ≥ 65 years of age
      vii. Is ≥ 55 years of age AND has: cardiovascular disease or hypertension, or chronic obstructive pulmonary disease/other chronic respiratory disease.
   C. Must not be
      i. hospitalized due to COVID-19, OR
      ii. requiring oxygen therapy due to COVID-19, OR
      iii. requiring an increase in baseline oxygen flowrate due to COVID-19 for those on chronic oxygen therapy due to an underlying non-COVID-19 related co-morbidity.

II. Bamlanivimab-Etesevimab Infusion
   A. Verify patient has received (or give to patient) patient fact sheet and there is a valid order. The order should be submitted by the authorized prescriber on the standardized form.
   B. Refer to the Bamlanivimab-Etesevimab Fact Sheet for Health Care Providers Emergency UseAuthorization (EUA) for Bamlanivimab for detailed information on infusion.
      i. http://pi.lilly.com/eua/bam-and-ete-eua-factsheet-hcp.pdf
      ii. This document should be accessible at all times and should be reviewed prior to the paramedic administering this medication.
   C. Inspect the medications. Bamlanivimab and etesevimab are both clear to slightly opalescent and colorless to slightly yellow to slightly brown.
   D. Bamlanivimab and Etesevimab are both supplied in a single dose vials of 700mg/20 mL.
   E. Use of an in-line or add-on 0.20/0.22-micron polyethersulfone (PES) filter is necessary.
   F. Dilute bamlanivimab-etesevimab using a prefilled 0.9% Sodium Chloride Injection bag for intravenousinfusion.
      i. Withdraw 20 mL (700 mg) of bamlanivimab from a single vial
      ii. Withdraw 40 mL (1400 mg) of etesevimab from 2 separate vials.

iii. Transfer all 60 mL into a prefilled 0.9% Sodium Chloride Injection infusion bag.

G. Gently invert IV bag by hand approximately 10 times to mix. **Do not shake**.

H. Administer the infusion at a maximum rate of **310 mL/hr** (see table below).

Infusion Times	
Size of Bag	**Minimum Infusion Time**
50 ml	21 minutes
100 mL	31 minutes
250 mL	60-70 minutes*

*70 minutes for patients weighing < 50 kg

Infusion Rates	
Drip Set	**Maximum Drip Rate**
10 gtt/mL	41 gtt/min
15 gtt/mL	62 gtt/min

I. Discontinue the infusion and flush IV with 10 mL of NSS, keeping the IV in place during monitoring period.

J. Treat any significant infusion related symptoms (e.g., nausea, fever, etc.) in accordance with appropriate approved protocols and/or prescribing clinician's orders.

III. Monitoring and Infusion-Related Problems

A. Full vital signs shall be obtained prior to beginning the infusion.

B. For patients with vital signs within normal limits, vital signs should be monitored at least every 30 minutes during the infusion and post-infusion observation period.

C. For patients that have or develop any abnormal vital signs or experience any side effects, vital signs must be recorded at least every 15 minutes. Contact medical control, if needed.

D. If a patient has minor symptoms during the infusion
   i. Slow the rate of infusion
   ii. If symptoms do not improve, treat per appropriate protocols and consider discontinuing the infusion.
   iii. If symptoms worsen, stop infusion and contact prescribing health care provider or medical control. If patient has significant symptoms, activate the 911 system, if necessary

E. All patients must be monitored, as above, for at least 60 minutes after completing or discontinuing the infusion. The patient may be released, with instructions to seek medical assistance or contact 911, if symptoms worsen.

IV. Documentation and Reporting

A. Any medication errors or serious adverse events must be reported to the prescribing health care provider.

B. Electronic Patient Care Reports must be completed for each patient receiving an infusion of monoclonal antibody therapy administered by the paramedic.
   i. Document vital signs, general assessment, and how the patient tolerates infusion, including potential infusion-related side effects or change in COVID-19 symptoms.
   ii. Document the lot number and expiration of the medication on order form
   iii. In the narrative section document "MAB infused by paramedic"
   iv. Complete and submit the electronic Patient Profile Form