SECTION 8B: PUMPS & DRUG ADMINISTRATION	POLICY: 8B.50
POLICY: ALPHA-1 PROTEINASE INHIBITORS	PAGE: 1 OF: 4

PURPOSE:

- To provide instruction on the safe and proper administration of Alpha-1 Proteinase Inhibitors to patients in the home setting.

POLICY:

- Alpha-1 Proteinase Inhibitors will be administered by a trained RN in accordance with a physician's order, any available / provided pharmacy or manufacturer instructions, and Agency policy.

- Alpha-1 Proteinase Inhibitors include Glassia, Prolastin, Aralast, Zemaira, and Humira.

GENERAL INFORMATION:

- Alpha-1 Antitrypsin Deficiency is an inherited condition passed from parents to children that can lead to serious lung disease in adults and/or liver disease at any age.

- Alpha-1 Proteinase Inhibitors, also called Alpha-1 PI, are used to treat the lung disease, Emphysema, caused by the lack of Alpha 1-Antitrypsin (AAT), which is a protein in the body. Alpha-1 Proteinase Inhibitors replace the protein when the body does not produce enough.

- Alpha-1 Proteinase Inhibitors are provided in single-use vials and come readily prepared as a liquid solution which do not require reconstitution.

- They are ordered at a dose of 60mg/kg. Dosing depends on patient's weight.

- Infusions can be safely administered in a minimum of 15 minutes, but some patients require a longer infusion time based on tolerance. If the physician's order dictates a specific infusion time, the RN will abide by that time.

SPECIAL CONSIDERATIONS:

- A registered nurse should remain with the patient for the entirety of the infusion.
- In-line filters are required for administration.
- When infusing directly from the vials, the RN should use a vented spike.
- Medication should be allowed to equilibrate to room temperature prior to infusion.
    - Medication should be stored at 2° to 8°C (36° to 46°F). If there are any doubts about the storage and viability of the drug, reach out to the Agency immediately so that confirmation may be sought from the Pharmacy.
- RN shall monitor for infusion-related reactions and hypersensitivity reactions including anaphylaxis, dyspnea, bronchospasm, urticaria, flushing, rash, and increased blood pressure and heart rate.
    - If anaphylaxis or other serious infusion-related reactions occurs, discontinue administration of Entyvio immediately and initiate appropriate treatment to include administration of anaphylactic medications as necessary and activating EMS.
    - Notify the Agency as soon as possible so that the Pharmacy & MD may be notified.

PROCEDURE:

1. Obtain and verify physician's orders including any pre-medication orders, concentration, rate of infusion, and emergency protocols (in-date anaphylactic kit on-hand). If you notice any discrepancies in the orders, notify the Agency before proceeding.
2. Explain procedure and purpose to patient and caregiver.
3. Perform initial Hand Hygiene and maintain throughout the procedure.
4. Assemble supplies on a clean, dry surface. Ensure all supplies needed to complete the infusion from beginning to end are available. If any supplies are missing, notify the Agency immediately and prior to starting the infusion process.
5. Assess and record patient's vital signs to establish a baseline and ensure vital signs are not contraindicative to starting the infusion.

6. Visually inspect each vial of medication. The solution should be clear and colorless to yellow-green and may contain a few protein particles.
    - If the solution appears discolored or cloudy, DO NOT use it.
    - Reach out to the Agency immediately so that the Pharmacy can be notified.
    - Pharmacy will advise as to how to handle the medication (i.e., disposal, return shipping, etc.).
7. Check the expiration dates on each vial to ensure they are within date.
8. Establish peripheral IV access or ensure access is in working condition. DO NOT tamper with medication until IV access is established. After 2 unsuccessful IV attempts, notify Agency immediately for further instruction on how to proceed.
9. Remove the flip off cap(s) from the single dose vial and wipe the top of the vial(s) with alcohol.
10. Draw up medication dose and inject in to pooling bag if using this method or insert vented spike into vial if administering directly from the vials.
11. Medication can be infused directly from the vials; or may be pooled to a sterile intravenous container/IV bag. In most cases, the medication will be administered via gravity tubing unless the Pharmacy has provided a peristaltic pump. Most gravity tubing is vented. If using tubing, gravity, or pump tubing, that does not contain a vent, a vented spike will be needed when infusing directly from the vial.
12. Begin the infusion. Administer intravenously over a minimum of 15 minutes or at the rate advised in the physician's order. In most cases, the medication will be administered via gravity tubing unless the Pharmacy has provided a peristaltic pump.
13. Obtain another set of vital signs 15 minutes into the infusion and at infusion end (if the infusion extends longer than 15 minutes). Your documentation should include at least 2 sets of vital signs: Baseline, 15 minutes after infusion start (this may be the infusion end), and infusion end.
14. Once infusion is complete, flush the IV with 10mL of saline (unless a different amount is noted in the physician's order).
15. Disconnect the patient and remove the IV.
16. Place a pressure dressing at the IV site.
17. Clean up your workspace and properly discard all waste ensuring that all needles have been placed in a sharps container.

18. Document the procedure, the patient's response to the procedure, and all lot numbers and expirations dates for vials used.

19. **Note:** If the infusion is not completed for any reason, notify the Agency immediately so the Pharmacy can be notified, and advisement received on how to store or dispose of the medication properly.

    - Examples for incomplete infusions include losing IV access that is unable to be re-established, symptoms of intolerance, medication is unusable or compromised (broken / leaking vial or discolored or altered in normal appearance). **NEVER** discard of the medication without speaking to the Agency first.