

Instructions to mix and instill Alteplase (Cathflo) for home hemodialysis patient use:

Mix immediately before use as there is no preservative in Alteplase vials. The mixed solution may be used within 8 hours following reconstitution when stored at 3 to 30°C.

Supplies needed:

- 1. Alteplase (Cathflo) vial(s) (must be kept in the fridge until ready for use)
- 2. Alcohol swabs
- 3. Four 3ml syringes with needles
- 4. One 10 mL bottle of sterile water for injection
- 5. One 10 ml bottle of sodium chloride 0.9% (without preservative)
- 6. Four 10ml or two 20ml pre-filled saline syringe(s)

To prepare Alteplase (Cathflo) to 2mg/ ml:

- 1. Using aseptic technique, withdraw 1.1ml of sterile water for injections.
- Inject the 1.1ml of sterile water for injection into the alteplase (Cathflo) 2mg vial, directing the water into the powder.
- Slight foaming is not unusual; let the vial stand undisturbed to allow large bubbles to disappear. Repeat in second vial.
- Mix by gently swirling until the contents are completely dissolved. Do not shake. The solution will have a pale yellow clear colour.

- Take two 3ml syringes and withdraw 1ml (2mg) of alteplase from each vial in each syringe.
- Withdraw sodium chloride 0.9% to fill the internal volume of catheter lumens + 0.2ml of overfill in two additional 3ml syringes. Your catheter lumens are _____ ml on each side plus 0.2ml overfill = ____ ml. This is the total amount to draw up of sodium chloride in each syringe.
- Make sure both clamps are closed on your catheter lumens and then attach the 3ml syringes filled with alteplase using aseptic technique to your catheter ports.
- 8. Open clamps and instill alteplase into each lumen.
- 9. Close both clamps.
- Using aseptic technique attach sodium chloride 0.9% syringes (from step #6) to each catheter port, open clamps and instill into each lumen.
- 11. Close both clamps
- 12. Leave alteplase in catheter lumens until next hemodialysis run.
- Prior to starting next treatment, using aseptic technique withdraw alteplase (4-5mls) from each catheter lumen and discard. If unable to withdraw from catheter lumens, may push remaining alteplase.
- Forcefully flush each catheter lumen with 2 (two) 10ml or 1 (one) 20ml prefilled syringe(s).
- 15. Inform Home Hemodialysis educator of effectiveness of alteplase (Cathflo) and discuss further actions.