

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 1mg/ml

1. Using aseptic technique, withdraw 2.2 mls of sterile water for injections.
2. Inject the 2.2mls of sterile water for injection into the alteplase (Cathflo) 2mg vial, directing the water into the powder.
3. Slight foaming is not unusual; let the vial stand undisturbed to allow large bubbles to disappear.
4. Mix by gently swirling until the contents are completely dissolved. Do not shake. The solution will have a pale yellow clear colour.

5. Take two 3ml syringes and withdraw 1ml (1mg) of alteplase in each syringe.
6. 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.
7. 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.
10. 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.
13. 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.
14. Forcefully flush each catheter lumen with 2 (two) 10ml or 1 (one) 20ml pre-filled syringe(s).
15. Inform Home Hemodialysis educator of effectiveness of alteplase (Cathflo) and discuss further actions.