Alteplase (t-PA) for Acute Ischemic Stroke

Instructions for dilution and administration

NOTE: t-PA to be prescribed and administered only under the direct supervision of the Stroke Team.

The recommended dose of t-PA for acute ischemic stroke is 0.9 mg/kg (maximum 90 mg) infused over 60 minutes with 10% of the total dose administered as an initial intravenous bolus over 1 minute (see t-PA dosing chart).

1. Obtain patient weight (can be estimated weight or stated weight from patient or family member).

2. Calculate dosage using dosing table and patient’s weight.

3. Go to Pyxis in the main nursing station (Pod 1) and obtain Alteplase 100 mg vial of powdered medication, 100 mL sterile diluent, and packaged spike.

4. Spike diluent first, then take powder vial and put on the other end of the spike. Invert and let diluent run in completely.

5. Remove spike. Rotate glass vial GENTLY to dissolve medication completely.

6. Using a 10 mL syringe and 18G needle, draw up 10% of total dose to be given as an IV bolus over one minute.

7. Hang remaining dose with vented tubing and infuse over one hour using an IV pump.

8. Monitor dose administration carefully as total dose is weight-based (0.9 mg/kg or a maximum of 90 mg), so not all the liquid in the vial will be administered.