

Soluble Insulin (Actrapid®) 8 units and Glucose 20g in 100ml IV infusion for the management of acute hyperkalaemia in adults

- This guide is to be used in conjunction with the hyperkalaemia management guideline on Microguide.
- Give **10% Calcium gluconate** if prescribed, before the Insulin/Glucose infusion.
- The whole process should have a two person check.
- Ensure **blood glucose monitoring** is undertaken every 30 minutes.
- 1. You will need:
 - One vial of glucose 20g in 100ml solution for infusion
 - An insulin syringe
 - **Actrapid** insulin vial
 - **50ml Sodium chloride 0.9%** infusion bag for flushing









- 2. Draw up 8 units of Actrapid into the insulin syringe.
- 3. Inject the Actrapid insulin into the glucose vial using one of the three outer marked addition ports of the rubber bung and mix well by rotating the vial gently. Check the solution for cloudiness or solid precipitates.
- 4. Attach a drug additive label onto the vial.





- **5. Spike** the **central addition port** of the vial's rubber bung with the **volumetric pump giving set**
- **6.** Hang the vial on a drip stand, **prime the line** and **open** the **venting port** on the giving set





- 7. Set the volumetric pump to give **80ml** over **30 minutes**. (24mls used to prime the line)
- 8. Once the glucose/insulin infusion has finished, **flush the line** by hanging a bag of **50ml sodium chloride 0.9%** and infuse over **10 minutes** to ensure the full dose of insulin/glucose is administered to the patient.

Blood Glucose Monitoring: Take measurements before and after starting the infusion. Then measure BM every 30 minutes for the first 2 hours and then every hour for a further 4 hours. Record the results on the diabetes monitoring chart. If pre-treatment BM is <7mmol/L, an infusion of 10% glucose at a rate of 50ml/hr should be given for 5 hours after the insulin-glucose infusion has finished.

If at any time BM is <4mmol/L treat as per trust hypoglycaemia guidelines.