

Medication is given intravenously for the following reasons:

- Speed
- Precise administration
- Efficacy of a medication i.e. antibiotics
- Patient unable to take oral medication
- Only route of administration for some medications
- Convenience and comfort for the patient

Prescribing	<ul style="list-style-type: none"> ▪ IV medication is prescribed on a prescription form, by a doctor it must be dated and signed. <ul style="list-style-type: none"> - Patient - Medication - Dose - Route <p>If the nurse is uncertain about any prescription, clarity must be gained from the prescribing Dr (GP, POAC or Opiva Nurse)</p>
Checking	<p>I The administering nurse must be a Registered nurse who has completed the TCHS certification process</p> <p>V Medications are checked by two people prior to administration. The 2nd person is preferably a health professional. If this is not possible than the check should be done with the recipient of the medication or their care provider.</p> <p>The following must be checked:</p> <ul style="list-style-type: none"> ▪ Right patient ▪ Right medication ▪ Right dose ▪ Right route – suitable for IV administration. ▪ Right time ▪ Time last given ▪ Expiry dates of medication and diluents ▪ Patient allergies/hypersensitivities/previous medication reactions ▪ Check diluents – correct type and amount, visual inspection of quality ▪ Plus general principles for checking medications per page 3

<p>Preparation of Medication</p>	<p>Medication prescribed to be administered by the IV route, may be given by the following modes:</p> <ul style="list-style-type: none"> ▪ Bag – as a continuous infusion fluid ▪ Injection site/bolus/Luer/Butterfly – over a number of minutes as per the manufacturer’s literature / notes on injectable medicines. <i>Nurses are not permitted to give IV medication directly into the vein using only needle and syringe with no cannula or butterfly in situ</i> ▪ If the exact mode for IV route and dilution is not specified by the prescription, refer to the manufacturer’s literature, pharmacy and compatibility charts for specific information, ‘notes on injectable drugs’ and Medsafe. ▪ Check compatibility of prepared medication with IV solution being administered. As a general rule medications should not be mixed. ▪ It is recommended that solutions for direct IV injection be prepared immediately before use and that dilutions in IV fluids be used within 1 hour of preparation.
<p>Administration</p>	<ul style="list-style-type: none"> ▪ Check the patient verbally and visually using details on prescription to verify checking procedure ▪ Explain purpose of medication to the patient and signs of adverse effects. Ensure informed consent obtained ▪ Make a further assessment of the patient and their expected response to treatment. (Check that base-line recordings have been done including BP). ▪ Ensure explanations & monitoring take cultural differences into account. ▪ Check the IV giving set for patency. <ul style="list-style-type: none"> ▪ Administer medication at the ‘Right’ rate ▪ If two IV medications are required to be given via a luer, they should be given one after the other with a NAACL injection 0.9% 10ml flush between the medications and at the conclusion of medication ▪ If medication is not prescribed to be given in a 100ml bag then the method of choice is by push via IV leur, provided notes on Injectables support the method. <p><i>See Technique for Reconstituting Intravenous Medications -pg 9</i></p> <ul style="list-style-type: none"> ▪ Place ‘Medication added’ Label on bag or burette (this should be signed by the nurse administering the medication).

Monitoring	<p>The administering nurse will:</p> <ul style="list-style-type: none"> ▪ Ensure the patient: <ul style="list-style-type: none"> - Knows to inform nurse immediately if they experience any adverse reaction - Knows the signs of adverse reaction – as appropriate ▪ Monitor the patient during the infusion of the medication. ▪ Know the immediate nursing actions to take in the event of an adverse reaction : <ul style="list-style-type: none"> - Stop the infusion - Ring for an ambulance 111, obtain medical assistance if available - Assess the patient, ABC and vital signs - Have airway handy and emergency equipment if available <p><i>*The nurse must stay with the patient who has had intravenous antibiotics administered for at least 20 minutes post administration with the butterfly or luer in situ.</i></p>
Documentation	<p>Completed and signed off by the nurse administering the medication. Document against the prescription</p> <ul style="list-style-type: none"> ▪ Nurse to document in Health 365 in ACC IV Therapy chart and clinical note. For POAC patients documentation also in POAC Daily Information <i>Refer to Flowchart process (P8.0 & P8.1)</i> ▪ time ▪ route ▪ batch number ▪ expiry date ▪ time drug administered and patient response. ▪ Informed consent gained

Technique for Reconstituting Intravenous Medications

Antibiotics for IV administration usually require reconstitution with Water for injection prior to administration.

Aseptic technique must be used:

1. Check medication and diluent

Be familiar with the appropriate solution reconstruction and quantity required. This will be dependent upon administrative route chosen. The medication may not dissolve completely if sufficient diluent is not used.

2. Draw diluent into syringe.

3. Flip metal bung cover off vial taking care not to touch the rubber seal. Wipe the top of the rubber seal with alcohol wipe (70% alcohol) and allow to dry. Insert the tip of the needle through the centre of the bung where it is thinner and easier to penetrate.

4. Inject the diluent into the vial, slowly to avoid frothing.

Air may need to be withdrawn from the vial to accommodate the diluent and avoid back splashing.

5. Swirl gently to dissolve. The needle and syringe may be left in place or removed.

It is good practice never to touch the seal with fingers. If the seal should require to be cleaned, this can be done with an alcohol swab ensuring that the seal is completely dry before piercing – being aware that in practice this takes about two minutes.

6. Withdraw the entire contents of the vial into the syringe.

Further diluent can be added to the mixture within the syringe to aid with medication calculations if required.

7. **Remember** prior to and following the administration of the IV medication the cannula should be flushed with 10 ml NACL injection 0.9%

Intermittent IV Administration

A medication may be diluted in a 100ml bag of IV fluids if the administration:

- Requires more dilution than it is practicable to inject
- Requires more time than it is practical to use for an injection
- Has been prescribed by Dr to be given this way

The administering nurse will:

1. Always check compatibility of IV medication with IV fluids.
2. Swab port on IV bag before injecting medication.
3. Add/administer the medication by the specified mode. When added to bag mix gently.
4. Infuse over prescribed rate of administration.
5. Ensure the label is attached to the bag until infusion of the medication is complete.
6. Remember to document within the patient clinical notes once the medication has been given
7. If IV line is to be removed wait 20 minutes after administration of medication if no adverse effects
8. Documentation - refer to flowchart

PROBENECID

Probenecid is sometimes prescribed along with antibiotics to increase antibiotic blood levels. This increase makes the antibiotic work better at treating certain infections.

Probenecid works by decreasing the kidneys' ability to remove the antibiotic from the body. A common antibiotic used in this way for POAC patients is Cephazolin.

When prescribed TCH nurses responsibility is one of education.

Dosage

The recommended dosage is 200mg (4 tablets) daily in two divided doses 12 hours apart.

Contraindications

- ☒ Hypersensitivity to any component of this product
- ☒ Persons with known blood dyscrasias (disorder of the blood)
- ☒ Persons with uric acid kidney stones
- ☒ Children under 2 years of age

Warnings and Precautions

Use with caution in patients with a history of peptic ulcer.

The appearance of hypersensitivity reactions requires cessation of probenecid therapy.

If probenecid is given with methotrexate, the dosage of methotrexate should be reduced and serum levels may need to be monitored.

Use during Pregnancy and Lactation

Category B2

Probenecid crosses the placental barrier and appears in cord blood. The use of any medicine in women of childbearing potential requires that the anticipated benefit be weighed against possible hazards.

Adverse Effects

Headache, dizziness, nausea, anorexia, vomiting, urinary frequency, exacerbation of gout, renal colic, and costovertebral pain.

Anaphylaxis, dermatitis, pruritus, urticaria, fever and Stevens-Johnson syndrome, anaemia, haemolytic anaemia, sore gums, flushing, alopecia.

www.Medsafe.govt.nz/profs/datasheet/a/aft-Probenecidtab