

ADULT INTERMITTENT (PULSED) INFUSION VANCOMYCIN: PRESCRIBING, ADMINISTRATION & MONITORING CHART

Patient Name:

Date of birth:

CHI no.:

Affix patient label

Age: Sex: M / F
 Weight: Height:
 Creatinine: On: / /

Source of initial dosage regimen:
 Online calculator (preferred method)
 Manual calculation
 Loading dose only at present, creatinine awaited

**PROMPT ADMINISTRATION
within 1 hour of recognition
of sepsis reduces mortality**

Step 1: Calculate & prescribe the loading and maintenance dose of vancomycin

- If creatinine is known – use the online vancomycin calculator.
- If creatinine is not known – calculate a loading dose based on actual body weight (see table). Calculate maintenance dose once creatinine is available.
- Prescribe the loading dose and maintenance dose and frequency in the prescribing sections of this chart (below).
- Prescribe vancomycin ‘as per chart’ on the medication chart (kardex).
- AVOID specifying dose or administration time on the kardex.

Step 2: Monitor vancomycin concentration and reassess the dose

- See overleaf for information on checking and interpreting vancomycin concentration results.
- Record the exact times of all measured concentrations below, reassess the dose and re-prescribe as appropriate.
- Monitor creatinine daily. Seek advice if renal function is unstable (e.g. a change in creatinine of >15-20 %).

Step 3: Assess daily: the ongoing need for vancomycin; toxicity

Signs of renal toxicity can include:
 ↓ urine output / oliguria or ↑ creatinine.

- Consider adjusting the dosage regimen or using an alternative agent if renal function changes.
- Discuss IV to oral switch with micro / ID physician.

1 Vancomycin Loading Dose Prescription				Administration Record		
Ensure vancomycin is prescribed ‘as per chart’ on the medication kardex				Ensure administration record is also completed in the kardex		
Date to be given	Time to be given	Vancomycin Dose (mg)	Prescriber’s signature PRINTED name and STATUS	Date given	*Infuse at no greater than 500 mg/hr* Time started	Given by

Actual body weight	Vancomycin loading dose
< 40 kg	750 mg in 250 mL NaCl 0.9% over 1.5 hours
40-59 kg	1000 mg in 250 mL NaCl 0.9% over 2 hours
60-90 kg	1500 mg in 500 mL NaCl 0.9% over 3 hours
>90 kg	2000 mg in 500 mL NaCl 0.9% over 4 hours

2 Maintenance Dose Prescription (Initial prescribing box)			Administration Record (sign for administration & record exact time(s))				
Drug VANCOMYCIN			Date				Continue or amend on a separate box if required
Dose (mg)			Month				
Route IV infusion	Date started		0800				
			1200				
Prescriber’s signature, PRINTED name and STATUS	See Box 3 <input type="checkbox"/> Stopped <input type="checkbox"/> Date: Initials:		1400				
			1800				
			2000				
			2200				
Additional instructions ***Max infusion rate = 500 mg/hr***			other time				
Creatinine (micromol/L) RECORD DAILY							
Date & time of blood sample taken							
Vancomycin level (mg/L)							
Is a dose change required? YES <input type="checkbox"/> prescribe in prescription box 3 Assess DAILY: the ongoing need for vancomycin; signs of toxicity							

3 Maintenance Dose Prescription (Additional prescribing box)			Administration Record (sign for administration & record exact time(s))				
Drug VANCOMYCIN			Date				Continue or amend on a separate box if required
Dose (mg)			Month				
Route IV infusion	Date started		0800				
			1200				
Prescriber’s signature, PRINTED name and STATUS	See box 4 <input type="checkbox"/> Stopped <input type="checkbox"/> Date: Initials:		1400				
			1800				
			2000				
			2200				
Additional instructions ***Max infusion rate = 500 mg/hr***			other time				
Creatinine (micromol/L) RECORD DAILY							
Date & time of blood sample taken							
Vancomycin level (mg/L)							
Is a dose change required? YES <input type="checkbox"/> prescribe in prescription box 4 OVERLEAF Assess DAILY: the ongoing need for vancomycin; signs of toxicity							

Patient name:

ADULT INTERMITTENT (PULSED) INFUSION VANCOMYCIN: PRESCRIBING, ADMINISTRATION & MONITORING CHART

CHI no.:

4 Maintenance Dose Prescription (Additional prescribing box)			Administration Record (sign for administration & record exact time(s))				
Drug		Date					
VANCOMYCIN		Month					
Dose (mg)	Route	Date started	<small>other time</small>				
	IV infusion		0800				
			1200				
Prescriber's signature, PRINTED name and STATUS		See Box 5 <input type="checkbox"/> Stopped <input type="checkbox"/> Date: _____ Initials: _____	1400				
			1800				
			2000				
			2200				
Additional instructions		<small>other time</small>					
Max infusion rate = 500 mg/hr							
Creatinine (micromol/L) RECORD DAILY							
Date & time of blood sample taken							
Vancomycin level (mg/L)							
Is a dose change required? YES <input type="checkbox"/> prescribe in prescription box 5 Assess DAILY: the ongoing need for vancomycin; signs of toxicity							

Continue or amend on a separate box if required

5 Maintenance Dose Prescription (Additional prescribing box)			Administration Record (sign for administration & record exact time(s))				
Drug		Date					
VANCOMYCIN		Month					
Dose (mg)	Route	Date started	<small>other time</small>				
	IV infusion		0800				
			1200				
Prescriber's signature, PRINTED name and STATUS		New Chart <input type="checkbox"/> Stopped <input type="checkbox"/> Date: _____ Initials: _____	1400				
			1800				
			2000				
			2200				
Additional instructions		<small>other time</small>					
Max infusion rate = 500 mg/hr							
Creatinine (micromol/L) RECORD DAILY							
Date & time of blood sample taken							
Vancomycin level (mg/L)							
Is a dose change required? YES <input type="checkbox"/> prescribe in a NEW PRESCRIPTION CHART Assess DAILY: the ongoing need for vancomycin; signs of toxicity							

Continue or amend on a separate box if required

Steps 2 – 3: Monitoring, interpreting and review

Checking the patient's vancomycin concentration

- Take a vancomycin trough (pre-dose) sample within 48 hours of starting therapy. Thereafter, sample at least every 2-3 days or daily if renal function unstable. Monitor creatinine daily.
- Record the exact time of all vancomycin samples on the prescribing box AND on the sample request form.

Interpreting vancomycin results and re-prescribing

- Always check that the dosing and sampling time history are correct before making any adjustments.
- Record the measured concentration, refer to the dose adjustment table and reassess the dose amount / dosing interval as indicated.
- Document the vancomycin concentration on the chart and the action taken in the medical notes. Prescribe the new dosage regimen if a change is required.
- Contact pharmacy for further advice as necessary (e.g. changing renal function, unexpected vancomycin result).

Vancomycin trough concentration	Suggested dose change
<10 mg/L	Increase the dose by 50% and consider reducing the dosage interval or seek advice
10 – 15 mg/L	If the patient is responding, maintain the present dosage regimen. If the patient is seriously ill, consider increasing the dose amount or reducing the dosage interval to achieve a trough level of 15 – 20 mg/L.
15 – 20 mg/L	Maintain the present dosage regimen
>20 mg/L	Stop until <20 mg/L then seek advice

If in doubt, take another sample before modifying the dosage regimen and/or contact pharmacy for advice

Please order from Pharmacy

If the measured concentration is unexpectedly HIGH or LOW

- Were dose and sample times recorded accurately?
- Was the correct dose administered?
- Was the sample taken from the line used to administer the drug?
- Was the sample taken during drug administration?
- Has renal function declined or improved?
- Does the patient have oedema or ascites?
- Did the patient receive the full intended dose?

Approved by: VERSION 1 AMT
Date: June 2014
Date of Review: June 2016