

Document control sheet

GUIDELINE NUMBER	
AREA IN WHICH THIS MONOGRAPH APPLIES	NICU

DIVISIONAL AUTHORISATION	
GROUP	DATE
Paediatric monograph review group	29/06/2023

AUTHORS		
Author	Position	Date
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If review:

	Position	Date
Reviewed by:		
Name		
Updated and transferred to new template by:		

Change history:

Changes Reference	Change details	Date

Neonatal: Vancomycin

Presentation:	Vancomycin 500mg powder
Indication:	Gram positive cover for infection in the neonate
Dose:	As per vancomycin prescription chart - see Net-i
Route of administration:	To be infused intravenously. Give over at least 60 minutes or maximum of 10mg per minute, whichever is the slowest . There is a risk of severe hypotension with more rapid administration.
Instructions for preparation and administration:	<ol style="list-style-type: none"> First dilution: Reconstitute Vancomycin 500mg with 9.8mL of water for injections to give a concentration of 50mg/mL Withdraw 2mL of the reconstituted Vancomycin using a filter needle Second Dilution: Further dilute this 2mL (100mg) with sodium chloride 0.9% or glucose 5% to 20mL to give a concentration of 5mg/mL Using a transfer device, transfer the total volume required to a suitably sized syringe using the worked example below. Discard any remaining 5mg/mL solution not required <p>Step 1: Divide the prescribed dose by 5 to give the number of mLs of 5mg/mL of double diluted solution required to obtain the prescribed dose. Step 2: Add an additional 5mL to the volume required in step one, this will give the total number of mLs required to include the prescribed dose + 5mL overage. (This will also determine final syringe size needed) Step 3: Multiply the total volume by 5 to give the number of mg Vancomycin in the final syringe (Note: the total number of mg in the syringe will be 25mg more than the prescribed dose to include overage required to prime the line).</p> <p>Worked Example: Baby Smith, CGA 30 weeks, weight 1.4kg Dose of Vancomycin prescribed based on 15mg/kg (rounded down to the nearest 0.5mg)*. Prescribed dose= 21mg</p> <p>Step 1: $21/5 = 4.2\text{mL}$ (Amount of 5mg/mL double diluted solution required) Step 2: $4.2\text{mL} + 5\text{mL} = 9.2\text{mL}$ (Total amount of 5mg/mL needed for prescribed dose + overage) Step 3: $9.2 \times 5 = 46\text{mg}$ (Total number of mg in syringe, prescribed dose + 25mg to include overage for line priming).</p> <p>* Note that subsequent Vancomycin doses will be dependent on levels and may be more or less than 15mg/kg to maintain therapeutic levels.</p>

	<p>Example of label to be added to product:</p> <table border="1" style="background-color: yellow; width: 100%;"> <tr> <th colspan="4" style="text-align: center;">DRUGS ADDED TO THIS INFUSION</th> </tr> <tr> <td colspan="2">PATIENT <i>Baby A</i></td> <td colspan="2">WARD <i>NICU</i></td> </tr> <tr> <td>DRUG <i>Vancomycin</i></td> <td>AMOUNT <i>46mg</i></td> <td rowspan="2">BATCH No.</td> <td>PREP'D BY <i>HH</i></td> </tr> <tr> <td colspan="2"><i>Sodium Chloride 0.9% Including 5mL overage Concentration 5mg/mL</i></td> <td>AMOUNT <i>9.2ml</i></td> <td>CHECKED BY <i>JH</i></td> </tr> <tr> <td colspan="2">Diluent.....</td> <td colspan="2"></td> </tr> <tr> <td>DATE PREP'D <i>21/03/23</i></td> <td>EXP. DATE <i>22/03/23</i></td> <td colspan="2">ROUTE <i>IV</i></td> </tr> <tr> <td>TIME PREP'D <i>0900</i></td> <td>EXP. TIME <i>0900</i></td> <td colspan="2"></td> </tr> <tr> <td colspan="4" style="text-align: center;">DISCONTINUE IF CLOUDINESS OR PRECIPITATE DEVELOPS.</td> </tr> </table>	DRUGS ADDED TO THIS INFUSION				PATIENT <i>Baby A</i>		WARD <i>NICU</i>		DRUG <i>Vancomycin</i>	AMOUNT <i>46mg</i>	BATCH No.	PREP'D BY <i>HH</i>	<i>Sodium Chloride 0.9% Including 5mL overage Concentration 5mg/mL</i>		AMOUNT <i>9.2ml</i>	CHECKED BY <i>JH</i>	Diluent.....				DATE PREP'D <i>21/03/23</i>	EXP. DATE <i>22/03/23</i>	ROUTE <i>IV</i>		TIME PREP'D <i>0900</i>	EXP. TIME <i>0900</i>			DISCONTINUE IF CLOUDINESS OR PRECIPITATE DEVELOPS.			
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<u>Prescribing</u>	Prescribe as per the Trust prescribing policy(Vancomycin charts available on Net-I at RDH site only)																																
SMART pump directions	<p>Load Syringe, prime line using the pump for accurate dosing</p> <ul style="list-style-type: none"> • Open 'Antibiotics' folder then open 'Vancomycin' programme. • Using DATA chevrons enter the total VTBI in mls and confirm • Enter the Total Time to infuse in hours and minutes then confirm • Visually confirm the rate (ml/h) • Perform STOP moment with medical team (Pump against prescription) • Connect to Baby • Press start button 																																
Known compatibility issues	See Y-site compatibility chart																																
Additional Comments:	*THIS SYRINGE WILL CONTAIN OVERAGE FOR PRIMING OF TUBING* Infusions should be prepared immediately before use																																

Note: The contents of this monograph should be read in conjunction with information available in the BNFC and Medusa

References:

Medusa, paediatric vancomycin, available on line [Injectable Medicines Guide - Display - Vancomycin - Intravenous - Version 9 - IVGuideDisplayMain.asp \(wales.nhs.uk\)](#) last accessed 15.03.23

BNFc, Vancomycin, Available online [Vancomycin | Drugs | BNFC | NICE](#) last accessed 15.03.23

UHDB aseptic worksheet, neonatal vancomycin, available on QPulse, last accessed 15.03.23