**DRUG:** VANCOMYCIN  
**PRESENTATION:**  
- Vial: 500mg  
- Prefilled Syringe KEMH: 40mg in Glucose 5% 8mL  

**ALERTS & RESTRICTIONS:**  
- HIGH RISK Medication  
- Antimicrobial Restriction: Category B ORANGE Monitored  

**ACTION & INDICATION**  
Glycopeptide antibiotic.  
- Empirical treatment of late onset neonatal sepsis  
- Gram positive infections including Methicillin resistant *Staphylococcus aureus* (MRSA)  
- Coagulase negative staphylococcal (CoNS) infections, *Staphylococcal*, *Enterococcal* and *Bacillus* infections due to strains resistant to other antibiotics.

<table>
<thead>
<tr>
<th>Corrected Gestational Age</th>
<th>Postnatal Age</th>
<th>Dose</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>30-37 weeks</td>
<td>All ages</td>
<td>15mg/kg/dose</td>
<td>12 hourly</td>
</tr>
<tr>
<td>0-7 days</td>
<td></td>
<td>10mg/kg/dose</td>
<td>12 hourly</td>
</tr>
<tr>
<td>&gt;7 days</td>
<td></td>
<td>10mg/kg/dose</td>
<td>8 hourly</td>
</tr>
<tr>
<td>&lt; 30 weeks</td>
<td>0-7 days</td>
<td>15mg/kg/dose</td>
<td>12 hourly</td>
</tr>
<tr>
<td></td>
<td>&gt;7 days</td>
<td>10mg/kg/dose</td>
<td>8 hourly</td>
</tr>
</tbody>
</table>

Higher doses may be requested at the discretion of the microbiologist.  
Dosage adjustment may be required in cases of renal impairment.

**PREPARATION:**  
IV: Use solution prepared in Pharmacy if available. If premade solution is not available, use the following process to prepare a 5mg/mL solution.  

**Step 1 – Reconstitution**  
Diluent: Water for Injections  
Add 10mL of diluent to a 500mg vial.

**Step 2 - Dilution**  
Withdraw 1mL (50mg/mL) of this solution.  
Further dilute to 10mL with 0.9% Sodium Chloride or appropriate glucose solution  
= 50mg/10mL  
= 5mg/mL  
Discard any remaining solution from the vial immediately.  
Concentrations of up to 10mg/mL can be used if fluid restricted.
**ADMINISTRATION:** IV Infusion: Infuse over one to two hours via syringe pump. A two hour infusion is recommended for the first dose or after an incidence of “Red man Syndrome”

**ADVERSE EFFECTS:**
- Nephrotoxicity - reduce dose in renal impairment. Increased risk when administered with other nephrotoxic drugs.
  - Auditory and vestibular deafness.
  - Thrombophlebitis, erythematous rash, hypotension
  - Tachycardia, palpitations,
  - Neutropenia, eosinophilia, thrombocytopenia
- “Red man Syndrome” – flushing of upper body (red neck), or pain and muscle spasm of the chest & back. Associated with too rapid infusion.

**COMMENTS:** Compatible Fluids: Sodium Chloride 0.9%, Glucose 5%, Glucose 10%
Glucose is the preferred diluent due to the duration of the infusion.

<table>
<thead>
<tr>
<th>Level</th>
<th>Next Level Taken</th>
<th>Target level</th>
</tr>
</thead>
<tbody>
<tr>
<td>First level</td>
<td>Trough level just prior to 4th dose</td>
<td>10-15mg/L OR 15-20mg/L</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>After change of dose</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ongoing monitoring</td>
<td>Trough level every 3 days</td>
<td>If proven (CoNS) or MRSA infection</td>
</tr>
</tbody>
</table>

**DRUG MONITORING:**

**REFERENCES:**
- KEMH Research/Audits, BNF for Children 2014, Neofax 2014