Guidelines for the Use of Zidovudine (AZT, Retrovir®)

Recommended Neonatal Dose, Route, and Interval

- **IV:** 1.5 mg/kg/dose given via infusion pump over 1 hour. **Do not administer IM.**
- **PO:** 2 mg/kg/dose, 30 minutes prior to OR 60 minutes after a meal
- Begin treatment within 6-12 hours of birth and continue for six weeks.

**Dosing Interval Chart**

<table>
<thead>
<tr>
<th>Gestation Age (weeks)</th>
<th>Postnatal Age (days)</th>
<th>Interval (hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤29</td>
<td>0 to 28</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>&gt;28</td>
<td>8</td>
</tr>
<tr>
<td>30 to 34</td>
<td>0 to 14</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>&gt;14</td>
<td>8</td>
</tr>
<tr>
<td>≥35</td>
<td>ALL</td>
<td>6</td>
</tr>
</tbody>
</table>

**Chief Indications**

- Prevention of maternal-fetal HIV transmission
- Consult pediatric infectious disease expert for treatment of infants with HIV infection

**Possible Adverse Reactions:**

1. Anemia, thrombocytopenia, neutropenia
2. Elevation in serum AST, LDH, and alkaline phosphatase
3. Seizures, anxiety, insomnia
4. Rash, fever
5. Nausea, vomiting, constipation

**Contraindications & Precautions**

- Life-threatening hypersensitivity to zidovudine
- Fluconazole decreases zidovudine clearance. Zidovudine dosing interval should be adjusted.
- Stop if ANC < 500/mm³ until marrow recovery is observed.

**Nursing Implications**

- Monitor for signs of bone marrow suppression.
- Monitor LFTs
- Check CBC with differential prior to initiation of treatment and weekly thereafter to assess for anemia and neutropenia
- Give oral doses every six hours around-the-clock.
- Oral suspension concentration = 10mg/mL
- Avoid breast feeding
References:
1. Neofax 2009

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