

IV Zidovudine (AZT)

Quick Reference

A. **Prior to infusion**

1. Verify physician order.
2. Assure patency of IV access and check for blood return prior to infusion of medication.
3. Obtain baseline vital signs including blood pressure, heart rate, and respiratory rate.
4. Assess for other pharmacological or herbal products patient may be taking (e.g., increased risk of nephrotoxicity, hepatotoxicity, lactic acidosis)
5. Visually inspected the medication solution for discoloration and particulate matter. If present, the solution should be discarded and notify the pharmacy.
6. Follow [JHHS hazardous drug policy MDUP002](#) for medication administration and disposal. Zidovudine (ZDV) is listed in Group 3 Hazardous Drugs (Reproductive Risk) per policy.
 - a. Prime IV line with small 50 – 100 ml minibag of normal saline prior to connecting the Zidovudine.
 - b. Wear appropriate PPE while handling the medication
 - c. If manipulating the medication, place chux pad in work area/space.
7. Use Alaris Pump Drug Library to program the pump. May apply **easy-peel label (no residue)** over the drug name on the infusion bag and IV pump screen (**Rationale:** Protect patient confidentiality).

B. **During infusion**

1. **Avoid rapid infusion or bolus injection.**
2. ZDV infusion should **NOT** be admixed with biological or colloidal solutions (e.g., blood products, protein-containing solutions).
3. ZDV may only infuse with NSS or D5W.
4. Check JHHS Lexicomp for IV compatibility with other medications (e.g., Magnesium Sulfate, Oxytocin). If incompatible, administer ZDV through a **dedicated line**.
5. Monitor lab tests per authorized prescriber's order (i.e. HIV infection: viral load, CD4 count, CBC and platelet count, liver function).
6. **Maintain patient confidentiality (HIPAA). Nursing and physician staff should NOT disclose to family members or talk about ZDV or other HIV topics in front of the patient's family without express permission of the patient.**
7. **Follow hospital policy for disposal of hazardous drugs.** All spills of hazardous drugs must be cleaned up immediately. Dispose medication bag and tubing in the designated medical waste container.

Compatibility Chart

Click on the drug/drug and/or combination to view compatibility information.

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Home Trissel's IV Compatibility Interactions Drug I.D.

	Magnesium sulfate	Oxytocin	Zidovudine
Drugs			
Magnesium sulfate		C Y-Site	
Oxytocin	C Y-Site		C Y-Site
Zidovudine		C Y-Site	

Legend:
C Indicates compatibility
U Uncertain or variable for this method
I Indicates incompatibility for this method
No data for administration methods chosen

C. **Additional Information (Reference: [JHHS Lexi-Drugs](#); & [NIH AIDS info online](#))**

1. Prevention of perinatal HIV transmission:
 - a. Intravenous (IV) zidovudine (ZDV) should be administered to women with HIV if HIV RNA is known or suspected to be >1,000 copies/mL (or if HIV RNA is unknown) near delivery.
 - b. Scheduled cesarean delivery at 38 weeks gestation (compared to 39 weeks for most indications) is recommended for women who have HIV RNA >1,000 copies/mL near delivery.
 - c. ZDV is **not** required for women who are receiving ART regimens and who have HIV RNA ≤50 copies/mL during late pregnancy and near delivery and no concerns regarding adherence to the ART regimen.
 - d. ZDV may be considered for women with HIV RNA between 50 copies/mL and 999 copies/mL. There are inadequate data to determine whether administration of IV ZDV to women with HIV RNA levels between 50 copies/mL and 999 copies/mL provides any additional protection against perinatal HIV transmission. This decision can be made on a case-by-case basis.
2. IV (preferred route):
 - a. During labor and delivery: Loading dose: 2 mg/kg over an hour followed by a continuous IV infusion of 1 mg/kg/hour until delivery. Note: Dosage based on total body weight.
For scheduled cesarean delivery, begin IV zidovudine 3 hours before surgery.
 - b. In cases of unscheduled cesarean delivery due to maternal and fetal indications, consider administering the loading dose then proceeding to delivery. Note: Dosage based on total body weight.