LAMIVUDINE

Read in conjunction with Disclaimer

Formulary: Restricted Requires Neonatologist or Microbiologist review within 24 hours of initiation. *For treatment of neonates born to HIV positive mothers as determined by HIV physician management plan.*	
Presentation	**Oral liquid:** 10 mg/mL
Classification	Antiretroviral - Nucleoside reverse transcriptase inhibitors
Indication	Post exposure propylaxis for high risk infants in combination with zidovudine and nevirapine.
Monitoring	• Monitor for lactic acidosis. • Hepatic function. • Full blood count at baseline, 2 and 4 weeks.
Interactions	• **Trimethoprim** competes with lamivudine for renal excretion, increasing lamivudine concentration and risk of toxicity; monitor closely in moderate-to-severe renal impairment. • **Sorbitol** decreases lamivudine concentration when lamivudine is given as the oral liquid and may decrease its efficacy (the higher the sorbitol dose, the lower the concentration). Avoid giving lamivudine oral liquid with sorbitol-containing drug products if possible, otherwise monitor viral load carefully.
Side Effects	**Reported in neonates (frequency unknown):** Increased liver function tests, anaemia, diarrhoea, electrolyte disturbances, hypoglycemia, jaundice and hepatomegaly, rash, respiratory infections, sepsis, gastroenteritis (with associated convulsions), and transient renal insufficiency associated with dehydration.
Storage & Stability	Store at room temperature, below 25^{o}C. • Discard 1 month after opening.
Comments	Also known as 3TC.

ORAL			
	Presentation	**Oral liquid:** 10 mg/mL	
	Dosage	***Only to be prescribed in conjunction with zidovudine and nevirapine.*** 2 mg/kg/dose every 12 hours. *Continue for the first 4 weeks of life, then stop.* **Dose adjustment** • Round dose up to the nearest 0.5 mg to assist in administration. • **Renal impairment:** No specific dose reduction recommendation for neonates are available, however dose reduction may be required. Lamivudine plasma concentrations are increased in patients with moderate to severe renal impairment due to decreased clearance.	
	Administration	• Shake well before use. • Draw prescribed dose into oral/enteral syringe. • Can be given Oral/OGT/NGT. • May be given anytime in relation to feeds.	

Related Policies, Procedures, and Guidelines

CAHS Neonatology Guidelines:

HIV Prevention In Infants Born To HIV Positive Women

Newborn Care of the Infant Born to a Mother receiving Minical or No Antenatal Care

Pharmaceutical and Medicines Management Guidelines:

CAHS Neonatology – Medication Administration Guideline

References

AusDI. Lamivudine. In: AusDI By Medical Director [Internet]. Australia: AusDI by Medical Director; 2021 [cited 2024 Dec 03]. Available from: https://www.ausdi.com/

Australian Medicines Handbook. Lamivudine. In: Australian Medicines Handbook [Internet]. Adelaide (South Australia): Australian Medicines Handbook; 2024 [cited 2024 Dec 03]. Available from: https://amhonline.amh.net.au/

UpToDate Lexidrug. Lamivudine: Pediatric drug information. In: UpToDate Lexidrug [Internet]. Wolters Kluwer; 2024. [cited 2024 Dec 03]. Available from: www.uptodate.com

British HIV Association (BHIVA). BHIVA guidelines for the management of HIV in pregnancy and postpartum 2018 (2020 third interim update). London: BHIVA; 2020. Available from: https://www.bhiva.org/file/5f1aab1ab9aba/BHIVA-Pregnancy-guidelines-2020-3rd-interim-update.pdf

Truven Health Analytics. Lamivudine. In: NeoFax [Internet]. Greenwood Village (CO): Truven Health Analytics; 2024 [cited 2024 Dec 03]. Available from: https://neofax.micromedexsolutions.com/

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