

IamIVUDine

Indication	<ul style="list-style-type: none"> • Prevention of human immunodeficiency virus (HIV) infection in newborn • High risk newborn whose mother¹: <ul style="list-style-type: none"> ○ Has detectable viral loads at delivery ○ Is not on therapy, presents late/in labour or without testing available ○ Has HIV infection detected post-partum 	
ORAL	Presentation	• Oral solution 10 mg/mL
	Dosage	• 2 mg/kg every 12 hours for 4 weeks (all gestations) ¹
	Preparation	• Not required
	Administration	<ul style="list-style-type: none"> • Draw up prescribed dose • Oral, OGT/NGT without regard to feeds²
Special considerations	<ul style="list-style-type: none"> • Used in combination with other ART (not in isolation)³ • Commence 3 drug treatment as soon as possible after birth <ul style="list-style-type: none"> ○ If HIV diagnosed late, commence no later than 72 hours after birth • If renal impairment, may need dose adjustment^{2,3} 	
Monitoring	• Nil required	
Compatibility	• Nil known	
Incompatibility	• Nil known	
Interactions	<ul style="list-style-type: none"> • Metronidazole: increased risk of peripheral neuropathy³ • Phenytoin: increased risk of peripheral neuropathy³ • Sorbitol decreases lamivudine concentration and may decrease its efficacy (the higher the sorbitol dose, the lower the concentration) <ul style="list-style-type: none"> ○ If co-administration cannot be avoided, monitor viral load closely 	
Stability	• Store below 25 °C ⁴	
Side effects³	<ul style="list-style-type: none"> • Hypersensitivity: rash, urticaria, myalgia, arthralgia, fever • Blood pathology: anaemia, neutropenia, thrombocytopenia • Digestive: abdominal pain, flatulence, vomiting, diarrhoea, pancreatitis, liver damage • Respiratory: cough, dyspnoea • Skeletal: osteonecrosis 	
Actions	<ul style="list-style-type: none"> • Anti-retroviral agent • Potent, selective inhibitor of HIV-1 and HIV-2 replication <i>in vitro</i> • Active against zidovudine resistant clinical isolates of HIV⁴ 	
Abbreviations	ART: anti-retroviral treatment; HIV: human immunodeficiency virus; OGT: oral gastric tube, NGT: nasogastric tube	
Keywords	lamivudine, 3TC, HIV; anti-retroviral, human immunodeficiency virus. ART	



The Queensland Clinical Guideline *Neonatal Medicines* is integral to and should be read in conjunction with this monograph. Refer to the disclaimer. Destroy all printed copies of this monograph after use.

References

1. Queensland Children's Hospital. Management of newborns born to women with HIV (human immunodeficiency virus) infection (CHQ-GDL-01243 v3.0). [Internet]. 2018 [cited 2019 February 20]. Available from: <https://gheps.health.qld.gov.au/childrenshealth/>.
2. IBM Micromedex® Neofax®. Lamivudine. In: IBM Micromedex® NeoFax®/Pediatrics (electronic version). IBM Watson Health, Greenwood Village, Colorado, USA. January 2019 [cited 2019 May 20]. Available from: <http://neofax.micromedexsolutions.com/neofax>.
3. British National Formulary for Children (BNFC) online. Lamivudine. [Internet]: Royal Pharmaceutical Society; August 2018 [cited 2018 September 05]. Available from: <https://www.medicinescomplete.com>.
4. MIMS Online. Lamivudine. [Internet]: MIMS Australia; October 2017 [cited 2018 September 05]. Available from: <https://www.mimsonline.com.au>.

Document history

ID number	Effective	Review	Summary of updates
NMedQ19.016-V1-R24	01/08/2019	01/08/2024	Endorsed by Queensland Neonatal Services Advisory Group (QNSAG)