



NEONATAL Medication Monograph

# PENTOXIFYLLINE

## (For Nebulisation)





This document should be read in conjunction with this [DISCLAIMER](#)

**Restricted:** Requires Neonatologist review within 24 hours of initiation

[SAS Category A](#) (item requires approval by TGA)

<b>Presentation</b>	<b>Ampoule (SAS):</b> 100mg/5mL = 20mg/mL
<b>Description</b>	Vasodilator - May reduce blood viscosity and improve blood flow by altering the rheology of red blood cells. Inhibits neutrophil activation and adhesion and platelet aggregation
<b>Indications</b>	<ul style="list-style-type: none"> <li>• Treatment of peripheral and cerebral vascular disorders.</li> <li>• Rescue medication for chronic lung disease</li> </ul>
<b>Precautions</b>	Caution use in patients at risk of bleeding
<b>Dosage</b>	<p><b>For Nebulisation ONLY</b></p> <p><b>Duration of therapy = 10 days</b></p> <p><a href="#">Neonate Spontaneously Breathing</a></p> <p>20 mg/ kg/ dose every 6 hours</p> <p><a href="#">Intubated Neonate</a></p> <p>10 mg/ kg/ dose every 6 hours</p> <p><i>If required, the 10 day course may be repeated after an interval of 5 days</i></p>
<b>Adverse Reactions</b>	<p><b>Common:</b> flushes, pruritus, urticaria, GI effects (nausea, vomiting, diarrhoea)</p> <p><b>Serious:</b> anaphylaxis, cardiac arrhythmias, intrahepatic cholestasis, transaminase elevation</p>
<b>Preparation</b>	<p>Prepared in Pharmacy</p> <p>If unavailable – use undiluted: Concentration = <u>20mg/mL</u></p>

<b>Administration</b>	Administer undiluted via Nebulisation until no fluid remains <b>Note:</b> The expiratory block of ventilators should be changed on a weekly basis when nebulised drugs are used
<b>Monitoring</b>	Oxygen saturation
<b>Storage</b>	Store at room temperature, below 25°C
<b>Notes</b>	Must not be used in patients with increased risk of bleeding SAS approval must be obtained for use of this medication
<b>References</b>	<p>Lauterbach R, Pawlik D, Zembala M, et al. Pentoxifylline in and prevention and treatment of chronic lung disease. <i>Acta Paediatr Suppl.</i> 2004;93(444):20–22. Schulzke SM, Deshmukh M, Nathan EA, Doherty DA, Patole SK. Nebulized pentoxifylline for reducing the duration of oxygen supplementation in extremely preterm neonates. <i>J Pediatr.</i> 2015;166(5):1158–1162.e2. doi:10.1016/j.jpeds.2015.01.040</p> <p>Schulzke SM, Kaempfen S, Patole SK. Pentoxifylline for the prevention of bronchopulmonary dysplasia in preterm infants. <i>Cochrane Database Syst Rev.</i> 2014;(11):CD010018. Published 2014 Nov 24. doi:10.1002/14651858.CD010018.pub2</p> <p>Lauterbach R, Szymura-Oleksiak J, Pawlik D, Warchoń J, Lisowska-Miszczyk I, Rytlewski K. Nebulized pentoxifylline for prevention of bronchopulmonary dysplasia in very low birth weight infants: a pilot clinical study. <i>J Matern Fetal Neonatal Med.</i> 2006;19(7):433–438. doi:10.1080/14767050600736754</p>

Keywords:	Chronic lung disease, pentox, PTX, trental		
Publishing:	<input checked="" type="checkbox"/> Intranet	<input checked="" type="checkbox"/> Internet	
Document owner:	Head of Department - Neonatology		
Author / Reviewer:	KEMH & PCH Pharmacy / Neonatology Directorate		
Date first issued:	March 2004	Version:	3.0
Last reviewed:	April 2020	Next review date:	April 2023
Endorsed by:	Neonatal Directorate Management Group	Date:	April 2020
Standards Applicable:	NSQHS Standards: 1  , 3  , 4  , 8 		

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