

Prednisolone for neonates

BRIEF ADMINISTRATION GUIDE

For detailed information refer to [The Australasian Neonatal Medicines Formulary \(ANMF\) prednisolone guideline](#)



Note: Shaded text indicates where Health NZ Waikato practice differs from ANMF

1. Medicine

1.1. Indications

Moderate to severe chronic lung disease in term corrected infants (>36/40 weeks corrected gestation). Consider if:

- $FiO_2 > 0.4$, or ventilator dependent, or MAP (mean airway pressure) or PEEP > 8cm H₂O
- At least 2 previous dexamethasone courses
- Significant pulmonary hypertension ruled out (Echo)
- Airway issues ruled out (clinically or ENT laryngo-tracheo-bronchoscopy)
- Respiratory consult +/- initiated

1.2. Route and Presentation

Oral

Supplied as:

- Prednisolone oral liquid 5 mg/mL, 30 mL bottle

1.3. Dose

0.25 - 2 mg/kg/day, in daily or divided doses, with a typical regime as follows:

- 2 mg/kg/day for one week, then
- 1 mg/kg/day for one week, then
- 0.5 mg/kg/day for one week, then
- 0.5 mg/kg/day every second day for 3 doses, then stop.

Note:

- Dosing regime and weaning is at the discretion of the Neonatologist and is based primarily on the infant's respiratory status
- Round dose to something sensible for administration (d/w Neonatologist). Continue to give the same dose without increasing for weight

2. Preparation and Administration

2.1. Compatible fluids

N/a

2.2. Administration Method

- Shake bottle well before withdrawing the dose
- Withdraw dose using an oral syringe
- Administer in the morning (for once daily doses) with food or milk

2.3. Monitoring

- Blood pressure, weight, height, growth, electrolytes, blood glucose levels, signs of infection.

2.4. Storage and Stability

- Store at room temperature (at or below 30°C) for both unopened and opened bottle
- Discard 4 weeks after opening

2.5. Competency for Administration

This procedure is carried out by, or under, the direct supervision of a registered nurse/registered midwife who holds current Health NZ Waikato Generic Medicine skills verification.

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3. References

- New Zealand Formulary for Children (NZFC), version 141, 2024. Prednisolone (systemic). Available from: https://www.nzfchildren.org.nz/nzfc_3846
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- Queensland Health Prednisolone neonatal guideline. Accessed via www.health.qld.gov.au/_data/assets/pdf_file/0035/1137788/nmq-prednisolone.pdf
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- Linafelter A et al. Extended course of prednisolone in infants with severe bronchopulmonary dysplasia. Early Human Development 136 (2019) 1-6.
- Bhandari A et al. Effect of a Short Course of Prednisolone in Infants With Oxygen-Dependent Bronchopulmonary Dysplasia. Pediatrics Vol 121 (2) Feb 2008, e344-349.
- Australasian Neonatal Medication Formulary, prednisolone monograph 2024. Accessed via www.anmfonline.org/wp-content/uploads/2024/03/Prednisolone_ANMFv1.0_20240711.pdf

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