

## Dexamethasone

**MANUFACTURER** Hospira

**FORM** Ampoule containing 3.3mg of dexamethasone base in 1ml  
(3.3mg dexamethasone base = 4.3mg dexamethasone sodium phosphate)

**INDICATION**

1a) Chronic Lung Disease – LOW DOSE

1b) Chronic lung disease – HIGH DOSE

2) Cerebral Oedema

3) Suspected laryngeal oedema following traumatic intubation or instrumentation of the airway

### DOSE RANGE

**NB.** For CLD regimens, the weight used to calculate the doses prescribed should be the baby's weight at the start of therapy, unless the consultant instructs otherwise.

#### 1a) Chronic Lung Disease – LOW DOSE

This is equivalent to DART regime and doses are expressed as dexamethasone base

| Days (Inclusive) | Dose            | Frequency     | Route |
|------------------|-----------------|---------------|-------|
| 1 to 3           | 60 microgram/kg | 2 times daily | IV    |
| 4 to 6           | 40 microgram/kg | 2 times daily | IV    |
| 7 and 8          | 20 microgram/kg | 2 times daily | IV    |
| 9 and 10         | 8 microgram/kg  | 2 times daily | IV    |

This course can be repeated once if necessary

If there is a poor response following initiation, or completion, of the LOW DOSE regimen, the following higher dose regimen may be considered by the attending consultant.

#### 1b) Chronic lung disease – HIGH DOSE

| Days (inclusive) | Dose            | No.of doses   | Route |
|------------------|-----------------|---------------|-------|
| 1 to 3           | 200microgram/kg | 3 times daily | IV    |
| 4 to 7           | 200microgram/kg | 2 times daily | IV    |
| 8 to 14          | 200microgram/kg | Once daily    | IV    |

Days 15 onwards - if the response is very good the course may be stopped. If the response is less than adequate, then the course should be continued at 200microgram/kg/dose ONCE DAILY or on alternate days.

#### Notes:

- Each segment of this course may be prolonged if the response is inadequate.
- Each segment of this course may be shortened if the side effects are unacceptable.
- **The decision about the length of each section will be the responsibility of a Consultant Paediatrician.**
- If doses of 300micrograms/kg/day are given for more than 7 days OR doses of 150micrograms/kg/day are given for more than 14 days, LIVE vaccinations must be delayed until three months after stopping treatment as per the guidance in the green book.

# West of Scotland NEONATAL Parenteral Drug Monographs

## 2) Cerebral Oedema

| AGE               | DOSE             | FREQUENCY                     | ROUTE |
|-------------------|------------------|-------------------------------|-------|
| Birth to 6 months | 250 microgram/kg | 3 times daily for 2 to 3 days | IV    |

## 3) Suspected laryngeal oedema following traumatic intubation or instrumentation of the airway

| AGE               | DOSE             | FREQUENCY                                   | ROUTE |
|-------------------|------------------|---------------------------------------------|-------|
| Birth to 6 months | 250 microgram/kg | 3 times daily for <b>three doses only</b> * | IV    |

\* **Note:** Dexamethasone should be given four hours before attempting extubation, then four hours after extubation. A final dose should then be administered 8 hours after second dose.

### RECONSTITUTION

Already in solution

### DILUTION

- Doses  $\geq$  400 microgram: use undiluted injection solution
- Doses < 400 microgram: dilute as follows;

|                                  |                  |
|----------------------------------|------------------|
| Dexamethasone Injection 3.3mg/ml | 0.3ml            |
| Glucose 5%                       | Up to 10ml total |

To give a 100microgram per ml solution. Then use the required volume.

Dosage guide

1mg in 10ml

100 micrograms in 1ml

10 microgram in 0.1ml

### METHOD OF ADMINISTRATION

By slow IV injection over 3 - 5 minutes.

### COMPATIBILITY

|                                 |                                                         |
|---------------------------------|---------------------------------------------------------|
| <b>Solution compatibility</b>   | Sodium chloride 0.45%, sodium chloride 0.9%, glucose 5% |
| <b>Solution incompatibility</b> | No information                                          |
| <b>IV Line compatibility</b>    | No information                                          |
| <b>IV Line incompatibility</b>  | No information                                          |

**THIS LIST IS NOT EXHAUSTIVE PLEASE CONTACT PHARMACY FOR FURTHER INFORMATION ON COMPATIBILITY WITH ANY MEDICINES NOT INCLUDED**

## CAUTIONS, CONTRA-INDICATIONS AND SIDE EFFECTS

- See Summary of Product Characteristics and most recent edition of BNF for Children (links below)

## FURTHER INFORMATION

- Blood glucose and blood pressure should be monitored
- Trials have suggested an association between the use of dexamethasone in preterm infants and the development of cerebral palsy. Assessment of the risk: benefit should therefore be made on an individual patient basis.
- 1mg dexamethasone base = 1.3mg dexamethasone sodium phosphate
- Avoid products containing a sulphite preservative.
- Dexamethasone administration results in increased serum levels of Phenytoin

PH 7.5-8.5

LICENSED STATUS Licensed for use in all ages, however CLD is not a licensed indication.

LINKS [BNF for Children:](#) / [Electronic Medicines Compendium](#)

APPLICABLE POLICIES [West of Scotland Neonatal Guidelines:](#)

Consult local policy if applicable

## REFERENCES

### Low dose for CLD

Dole LW et al; DART Study Investigators. Low-dose dexamethasone facilitates extubation among chronically ventilator-dependent infants: a multicenter, international, randomised, controlled trial. Paediatrics. 2006;117:75-83.

|                  |                     |              |               |
|------------------|---------------------|--------------|---------------|
| Document Number: | 001                 | Supersedes:  | Nil           |
| Prepared by:     | WoS Neo pharm group | Checked by   | Anisa Patel   |
| Date prepared    | May 2016            | Date updated | December 2018 |
| Updated by       | Anisa Patel         | Review Date  | Dec 2021      |

**Administer reconstituted solutions immediately.**

**All vials, ampoules and infusion bags are for single use only unless otherwise stated.**

Dose may vary depending on indication, age, renal function, hepatic function, and concomitant medications.  
This monograph should be used in conjunction with the package insert, BNF for Children, and Summary of Product Characteristics. For further advice contact your clinical pharmacist or pharmacy department.