Ballarat Health Services

Neonatal Drug Guideline

PORACTANT ALPHA (Curosurf®)

DESCRIPTION AND INDICATION FOR USE

Poractant alpha is an exogenous pulmonary surfactant which reduces surface tension of the alveoli during ventilation and stabilises the alveoli against collapse. A deficiency of pulmonary surfactant in preterm infants results in respiratory distress syndrome (RDS) characterised by poor lung expansion, inadequate gas exchange and a gradual collapse of the lungs. Curosurf® compensates for the deficiency of surfactant and restores surface activity to the lungs of these infants.

DOSE

Treatment of prevention of RDS in preterm infants
Endotracheal: 1.25 – 2.5 mL/kg (100 - 200 mg/kg of phospholipid)

Repeat doses of 100 mg/kg may be considered 6 to 12 hours after the first dose in infants who have persistent signs of RDS and remain ventilator dependent after consultation with a neonatologist at the receiving NICU or a NETS consultant (maximum total dose: 300 mg/kg).

RECONSTITUTION/DILUTION – Not required. Do NOT dilute with any fluid.

PREPARATION

Vial = 240 mg phospholipids in 3 mL (STORED IN FRIDGE)

Do not shake the vial.
Warm the vial to room temperature before administration (this will take about 20 minutes).
Invert the vial gently to ensure uniformity of the suspension but **do not shake**.

NOT for IV, IM, subcut use

ROUTE AND METHOD OF ADMINISTRATION

Endotracheal: Administer via a gavage tube cut so that the tip lies 1 cm above the end of the endotracheal tube. The infant should be placed supine and surfactant given as quickly as tolerated.

Surfactant can occlude the endotracheal tube and it may be necessary to cease dosage until the tube is cleared and chest wall movement resumes.

Suction should be avoided (unless absolutely necessary to clear obstruction) for at least an hour after surfactant administration so as to allow for complete distribution of the surfactant.

SIDE EFFECTS

- Transient adverse effects include bradycardia, hypotension, endotracheal tube blockage and oxygen desaturation.
- Severe adverse effects may include pulmonary haemorrhage (particularly in very premature infants)

SPECIAL PRECAUTIONS

- Correction of acidosis, hypotension, anaemia, hypoglycaemia and hypothermia is recommended prior to Curosurf® administration

NURSING RESPONSIBILITIES

- Observations/Monitoring
  - Monitor oxygen saturation, pO_2, pCO_2, ventilator settings, FiO_2, and notable events every 10 minutes for 30 minutes then revert to normal frequency of observations – or as otherwise directed by the Paediatrican/Paediatric Registrar
  - Repeat arterial blood gas measurement 30 minutes after dosing with surfactant
- Inspect the vial visually for discolouration prior to administration. The colour of Curosurf® is white to creamy white
- Protect from light during storage
- If a vial is warmed to room temperature (for up to 24 hours) but not used, it may be returned to the refrigerator. If a vial has been out of refrigeration for longer than 24 hours and not used it must be discarded. Returning a warmed vial to the refrigerator may only be done once and the ampoule box must be labeled to indicate that it has been removed from the refrigerator and warmed. Once the vial is warmed a second time it must be used within 24 hours or discarded.