NEWBORN USE ONLY
GIVEN ON DOCTORS ORDER ONLY

CUROSURF
Poractant Alfa

DESCRIPTION
Natural surfactant from pig lungs. It lowers surface tension on alveolar surfaces and stabilises the alveoli against collapse. Has a high concentration of phospholipids in a low volume.

PHARMACOLOGY
Curosurf contains only polar lipids (mainly phospholipids) and the essential hydrophobic proteins SP-B and SP-C. It does not have any synthetic additives, need smaller volumes to administer, faster acting and less wastage than Survanta.

USE
1. Respiratory distress syndrome
2. Meconium aspiration syndrome
3. Surfactant deficiency

PRESENTATION
1.5 ml/vial contains 80mg/ml phospholipids
3ml/vial contains 80mg/ml phospholipids

DOSE
STANDARD DOSE 1.25ml/kg (100mg/kg) dose can be given 12 hourly.
Maximum number of vials to be used based on birthweight
-<1250gm 2 x 1.5ml vials
-1250-2500gm 3 x 1.5ml vials

HIGH DOSE 2.5ml/kg (200mg/kg) dose followed by 100mg/kg for subsequent doses. The advantage of high dose is shorter duration of the need of FiO2 >0.40. High dose can be given at the discretion of neonatologist.

ROUTE
Intratracheal instillation

ADMINISTRATION
Before administration, allow to stand drug in room temperature for 20 minutes or warm in the hand for at least 8 minutes. ARTIFICIAL WARMING METHODS SHOULD NOT BE USED. DO NOT FILTER OR SHAKE.

Before administration, assure proper placement of ETT and assess need to suction same.
Using sterile technique shorten a 5F end-hole catheter (feeding tube) that tip of catheter does not protrude beyond the tip of ETT above carina. Withdraw the contents of vial into a plastic syringe through a large (>20 gauge) drawing up needle. Attach shortened catheter to syringe. Fill catheter that only dose to be given remains in syringe.

Administer the dose in 2 aliquots, each over 10-20 seconds. Wait for 30 seconds or until the baby is stable, saturations and heart rate returned to previous baseline. Repeat the next aliquot. During instillation baby may need to be disconnected from the ventilator. Alternatively, it can be given via neonatal suction valve without disconnecting. Endotracheal tube reflux of the drug is common with second method. The use of bagging is not recommended and that stabilisation occurs through parameter changes on the ventilator.
Do not suction for at least eight hours after administration unless signs of significant airway obstruction occur.
CUROSURF cont.

**STORAGE**  
24 HOURS IN REFRIGERATOR (2-8°C). DO NOT FREEZE.  
Discard the used vial and do not reuse the leftover Curosurf!

**MONITORING**  
Continuous cardio-respiratory monitoring and \( \text{SaO}_2 \) in place. Intra-arterial monitoring desirable.

**ADVERSE EFFECTS**  
During administration transient episodes of bradycardias and decreased oxygen saturation can occur. If this occurs, stop dosing procedure and initiate appropriate measures to alleviate condition. Resume dosing once stabilized. Other transient side effects, although rare, include endotracheal tube reflux or blockage, pallor, vasoconstriction, hypotension, hypertension, hypocarbia, hypercarbia, and apnoea.

**INCOMPATIBILITY**  
Not applicable.

**REFERENCES**

First Randomized Trial  

Single versus Multiple Doses  

High versus Low Doses  

Early versus Late Treatment  

Prophylaxis versus Rescue Treatment  