Survanta (Beractant)
Newborn use only

2020

Alert	This medication should only be administered by a medical officer or nurse practitioner.
Indication	Treatment and prophylaxis of respiratory distress syndrome (RDS). Treatment of meconium aspiration syndrome (MAS).
Action	Lowers surface tension on alveolar surfaces during respiration and stabilises the alveoli against collapse at resting transpulmonary pressures.
Drug type	Pulmonary surfactant
Trade name	Survanta
Presentation	Suspension for intra-tracheal use 200 mg/8 mL
Dose	**Respiratory distress syndrome** Single dose of 100 mg/kg Dose may be repeated every 6 hours if required Maximum 4 doses in first 48 hours of life **Meconium aspiration syndrome** Single dose of 150 mg/kg Dose may be repeated every 6 hours if required Maximum of 4 doses Studies have used doses in the range 100−150 mg/kg/dose.
Dose adjustment	Therapeutic hypothermia – Not applicable. ECMO – Not applicable Renal impairment – No dose adjustment. Hepatic impairment – No dose adjustment.
Maximum dose	RDS: 400 mg/kg/day MAS: 600 mg/kg/day
Total cumulative dose	
Route	Intra-tracheal
Preparation	Not applicable
Administration	This medication should only be administered by a medical officer or nurse practitioner. Inspect product visually for discolouration prior to administration (suspension should be white to light brown). Before use, the vial should be slowly warmed to room temperature (can be warmed in hand for at least 8 minutes or stood at room temperature for at least 20 minutes) and gently turned upside down in order to obtain a uniform suspension. DO NOT SHAKE. Assess patency and position of endotracheal tube (ETT) prior to administration. Clear the trachea of secretions. Shorten a 5 French end-hole catheter so that the length of the catheter is 1 cm shorter than the ETT tube. Slowly withdraw the contents of the vial(s) into a syringe through a needle (≥ 20 gauge). Do not shake. Attach shortened catheter to syringe. Fill catheter with surfactant. Administer in 1 to 2 aliquots as tolerated with the neonate in neutral supine position. If the infant is on a ventilator, the catheter can be inserted into the infant's ETT without interrupting ventilation by passing the catheter through a neonatal suction valve attached to the ETT. This is especially useful in high-frequency ventilation when it potentially minimises de-recruitment. Alternatively, surfactant can be instilled through the catheter by briefly disconnecting the ETT from the ventilator. Approximately 2 mL of air should be used to push any remaining surfactant in the catheter into the lungs. Please note: there are other administration methods available which are beyond the scope of this protocol.
Monitoring	Continuous oxygen saturation and cardiorespiratory monitoring.
Contraindications	None known
Precautions	Beractant can rapidly affect oxygenation and lung compliance. Therefore, its use should be restricted to a highly supervised clinical setting with immediate availability of clinicians experienced with intubation, ventilator management and general care of premature infants.

Drug interactions	Not applicable
Adverse reactions	Transient: Bradycardia, hypotension, endotracheal tube blockage and oxygen desaturation (these events require stopping beractant administration and taking appropriate measures to alleviate the condition. After the patient is stable, dosing may proceed with appropriate monitoring). Ventilator settings may need to be adjusted post-surfactant to accommodate increased lung compliance.
Compatibility	Beractant should not be mixed with any other medications or fluids.
Incompatibility	No information.
Stability	Vials are for single use only. DO NOT SHAKE. Unopened, unused vials of beractant that have warmed to room temperature can be returned to refrigerated storage within 8 hours for future use. Document on the packaging the date and time the product was removed from the fridge. Notify Pharmacy Department/NICU Pharmacist if this occurs. Do not warm to room temperature and return to refrigerated storage more than once.
Storage	Store at 2−8°C. Protect from light.
Excipients	
Special comments	Surfactant may alter amplitude-integrated electroencephalography (aEEG) recordings after administration.
Evidence	Refer to full version.
Practice points	Refer to full version.
References	Refer to full version.

VERSION/NUMBER	**DATE**
Original 1	**27/10/2015**
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