

SALBUTAMOL (for Inhalation)

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| Trade Name | Respigen® 100 microgram per puff (MYLAN) Asthalin® Nebuliser Solution 2.5 mg/2.5 mL (Rex Medical) Asthalin® Nebuliser Solution 5 mg/2.5 mL (Rex Medical) |
| Class | Selective beta 2 agonist |
| Mechanism of Action | Stimulates beta 2 adrenergic receptors in the smooth muscle of the lung resulting in bronchodilation |
| Indications | Relief of reversible airway constriction |
| Contraindications | Known hypersensitivity to salbutamol or any constituents of the inhalation formulation. |
| Supplied As | Aerosol Inhaler 100 microgram/puff containing 200 doses Nebules containing 2.5 mg/2.5 mL (= 1mg/mL) liquid for nebulisation (20 nebulers per box) (Caution: nebulers containing salbutamol 5 mg / 2.5 mL are also available check you have the correct strength) |
| Dilution | The final volume required to adequately pressurise the nebulisers used in CDHB is 4mL. Nebuliser solution can be diluted with 0.9% sodium chloride to make up to a final volume of 4mL prior to nebulisation. |
| Dosage | Inhaler: 1- 2 puffs =100 – 200 microgram (via spacer) Maintenance dosing up to 5 puffs may be required to initially get control if clinically deteriorating) Nebuliser: 1.25 - 2.5mg ⁶ |
| Guardrail | N/A |
| Interval | 6– 8 hourly for maintenance Can be given more frequently if symptomatic eg:1-2 hourly for acute exacerbation |
| Administration | Inhaler: via spacer and mask – see comments section below Nebuliser: via mask (can also be given through Hi-Flow and CPAP circuits with adaptors) |
| Compatible With | N/A |
| Incompatible With | N/A |
| Interactions ... | Potential additive potassium lowering effect when used in combination with thiazide diuretics (eg chlorothiazide), corticosteroids, (eg. prednisolone) or frusemide. |

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| | <p>Possible risk of increased intraocular pressure when used in combination with ipratropium</p> <p>Use in combination with caffeine may theoretically increase risk of tachycardia and / or muscle tremor</p> |
| Monitoring | Serum potassium, oxygen saturation, heart rate, respiratory rate. |
| Stability | <p>Inhaler: 6 months or manufacturer's expiry which ever is shorter.</p> <p>Nebules: Single use only</p> |
| Storage | Room temperature, protect from light |
| Adverse Reactions | Fine tremor (particularly noticeable in the hands), nervous tension, headache, muscle cramps, tachyarrhythmias, peripheral vasodilation, hypotension, bronchospasm (occasionally severe), rash, angioedema, hypokalaemia, hyperglycaemia, acidosis, nausea, vomiting. |
| Metabolism | <p>Peak bronchodilation occurs within 0.5 – 2 hours of inhalation.</p> <p>Duration of effect = 2 - 5 hours</p> |
| Comments | <p>For supply of extra spacer devices and advice on cleaning contact Pharmacy.</p> <p>Inhaler must be used with recommended spacer and correct spacer technique: Prior to the first dose of inhaled salbutamol and before placing the mask of the spacer over the baby's mouth and nose give 5 puffs into the chamber to "prime" the interior surface of the spacer. Next with the mask of the spacer held over baby's mouth and nose give 1 puff and then allow 5 normal breaths. Repeat with as many puffs as required.</p> <p>Children's Emergency Care usually has spare masks.</p> |
| References | <ol style="list-style-type: none"> 1. www.medsafe.govt.nz 2. Paediatric and Neonatal Dosage Handbook Taketomo et al. 19th Edition 2012. 3. BNF for Children 2011-2012 4. www.nzf.org.nz 5. Tal A, Bavilski C, Yohai D et al. Dexamethasone and Salbutamol in Treatment of Acute Wheezing in Infants. <i>Paediatrics</i> (1983) 71(1):13-18. 6. www.UpToDate.com |
| Updated By | <p>A Lynn, B Robertshawe Feb 2014</p> <p>A Lynn, B Robertshawe March 2022 (routine review)</p> |