

- ▶ **Salamol Easi-Breathe** (Teva UK Ltd)
Salbutamol (as Salbutamol sulfate) 100 microgram per 1 dose Salamol 100micrograms/dose Easi-Breathe inhaler | 200 dose [PoM] £6.30 DT = £6.30
- ▶ **Ventolin Evohaler** (GlaxoSmithKline UK Ltd)
Salbutamol (as Salbutamol sulfate) 100 microgram per 1 dose Ventolin 100micrograms/dose Evohaler | 200 dose [PoM] £1.50 DT = £1.50

Nebuliser liquid

- ▶ **Salbutamol (Non-proprietary)**
Salbutamol (as Salbutamol sulfate) 1 mg per 1 ml Salbutamol 2.5mg/2.5ml nebuliser liquid unit dose vials | 20 unit dose [PoM] £2.48 DT = £2.17
Salbutamol (as Salbutamol sulfate) 2 mg per 1 ml Salbutamol 5mg/2.5ml nebuliser liquid unit dose vials | 20 unit dose [PoM] £3.91 DT = £3.91
- ▶ **Salamol Steri-Neb** (Teva UK Ltd)
Salbutamol (as Salbutamol sulfate) 2 mg per 1 ml Salamol 5mg/2.5ml nebuliser liquid Steri-Neb unit dose vials | 20 unit dose [PoM] £3.82 DT = £3.91
- ▶ **Ventolin** (GlaxoSmithKline UK Ltd)
Salbutamol (as Salbutamol sulfate) 5 mg per 1 ml Ventolin 5mg/ml respirator solution | 20 ml [PoM] £2.18 DT = £2.18
- ▶ **Ventolin Nebules** (GlaxoSmithKline UK Ltd)
Salbutamol (as Salbutamol sulfate) 1 mg per 1 ml Ventolin 2.5mg Nebules | 20 unit dose [PoM] £1.65 DT = £2.17
Salbutamol (as Salbutamol sulfate) 2 mg per 1 ml Ventolin 5mg Nebules | 20 unit dose [PoM] £2.78 DT = £3.91

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Terbutaline sulfate**● INDICATIONS AND DOSE****Acute asthma**

- ▶ BY SUBCUTANEOUS INJECTION, OR BY SLOW INTRAVENOUS INJECTION
- ▶ Child 2-14 years: 10 micrograms/kg up to 4 times a day (max. per dose 300 micrograms), reserve intravenous beta₂ agonists for those in whom inhaled therapy cannot be used reliably or there is no current effect
- ▶ Child 15-17 years: 250–500 micrograms up to 4 times a day, reserve intravenous beta₂ agonists for those in whom inhaled therapy cannot be used reliably or there is no current effect
- ▶ BY CONTINUOUS INTRAVENOUS INFUSION
- ▶ Child: Loading dose 2–4 micrograms/kg, then 1–10 micrograms/kg/hour, dose to be adjusted according to response and heart rate, close monitoring is required for doses above 10 micrograms/kg/hour, reserve intravenous beta₂ agonists for those in whom inhaled therapy cannot be used reliably or there is no current effect

Moderate, severe, or life-threatening acute asthma

- ▶ BY INHALATION OF NEBULISED SOLUTION
- ▶ Child 1 month-4 years: 5 mg, repeat every 20–30 minutes or when required, give via oxygen-driven nebuliser if available
- ▶ Child 5-11 years: 5–10 mg, repeat every 20–30 minutes or when required, give via oxygen-driven nebuliser if available
- ▶ Child 12-17 years: 10 mg, repeat every 20–30 minutes or when required, give via oxygen-driven nebuliser if available

Exacerbation of reversible airways obstruction (including nocturnal asthma) | Prevention of exercise-induced bronchospasm

- ▶ BY INHALATION OF POWDER
- ▶ Child 5-17 years: 500 micrograms up to 4 times a day, for occasional use only
- ▶ BY MOUTH
- ▶ Child 1 month-6 years: 75 micrograms/kg 3 times a day (max. per dose 2.5 mg), administration by mouth is not recommended

- ▶ Child 7-14 years: 2.5 mg 2–3 times a day, administration by mouth is not recommended
- ▶ Child 15-17 years: Initially 2.5 mg 3 times a day, then increased if necessary to 5 mg 3 times a day, administration by mouth is not recommended

PHARMACOKINETICS

- ▶ At recommended inhaled doses, the duration of action of terbutaline is about 3 to 5 hours.

● UNLICENSED USE

- ▶ With oral use Tablets not licensed for use in children under 7 years.
- ▶ With intravenous use or subcutaneous use Injection not licensed for use in children under 2 years.

- **CAUTIONS** High doses of beta₂ agonists can be dangerous in some children

- **INTERACTIONS** → Appendix 1: beta₂ agonists

● SIDE-EFFECTS**GENERAL SIDE-EFFECTS**

- ▶ **Common or very common** Hypotension · muscle spasms
- ▶ **Rare or very rare** Vasodilation
- ▶ **Frequency not known** Angioedema · anxiety · behaviour abnormal · bronchospasm · circulatory collapse · oral irritation · skin reactions · sleep disorder · throat irritation

SPECIFIC SIDE-EFFECTS**▶ Uncommon**

- ▶ With parenteral use Pulmonary oedema
- ▶ **Rare or very rare**
- ▶ With parenteral use Lactic acidosis
- ▶ **Frequency not known**
- ▶ With parenteral use Akathisia · bleeding tendency
- **PREGNANCY** Inhaled drugs for asthma can be taken as normal during pregnancy.
- **BREAST FEEDING** Inhaled drugs for asthma can be taken as normal during breast-feeding.
- **DIRECTIONS FOR ADMINISTRATION**
- ▶ With intravenous use For *continuous intravenous infusion*, dilute to a concentration of 5 micrograms/mL with Glucose 5% or Sodium Chloride 0.9%; if fluid-restricted, dilute to a concentration of 100 micrograms/mL.
- ▶ When used by inhalation For *nebulisation*, dilute nebuliser solution with sterile Sodium Chloride 0.9% solution according to nebuliser type and duration of administration; terbutaline and ipratropium bromide solutions are compatible and may be mixed for nebulisation.

● PATIENT AND CARER ADVICE

- ▶ When used by inhalation For *inhalation by dry powder*, advise patients and carers not to exceed prescribed dose and to follow manufacturer's directions; if a previously effective dose of inhaled terbutaline fails to provide at least 3 hours relief, a doctor's advice should be obtained as soon as possible. For *inhalation by nebuliser*, the dose given by nebuliser is substantially higher than that given by inhaler. Patients should therefore be warned that it is dangerous to exceed the prescribed dose and they should seek medical advice if they fail to respond to the usual dose of the respirator solution.

- **MEDICINAL FORMS** There can be variation in the licensing of different medicines containing the same drug. Forms available from special-order manufacturers include: solution for injection

Solution for injection**▶ Bricanyl** (AstraZeneca UK Ltd)

- Terbutaline sulfate 500 microgram per 1 ml** Bricanyl 2.5mg/5ml solution for injection ampoules | 10 ampoule [PoM] £20.09 DT = £20.09
- Bricanyl 500micrograms/1ml solution for injection ampoules | 5 ampoule [PoM] £6.48 DT = £6.48