

NEW ZEALAND DATA SHEET

1. PRODUCT NAME

VENTOLIN 2 mg/5 mL Syrup.

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Salbutamol 2 mg as sulphate in each 5 mL of a fruit-flavoured, sugar free syrup, which is devoid of artificial colouring agents.

For full list of excipients, see section 6.1 List of excipients.

3. PHARMACEUTICAL FORM

Syrup.

4. CLINICAL PARTICULARS

4.1 Therapeutic indications

Salbutamol is a selective beta-2 adrenoceptor agonist indicated for the treatment or prevention of bronchospasm. It provides short acting bronchodilation in reversible airways obstruction due to asthma, chronic bronchitis and emphysema.

Bronchodilators should not be the only or main treatment in patients with persistent asthma. In patients with persistent asthma unresponsive to salbutamol, treatment with inhaled corticosteroids is recommended to achieve and maintain control. Failing to respond to treatment with salbutamol may signal a need for urgent medical advice or treatment.

VENTOLIN Syrup is suitable oral therapy for children or those adults who prefer liquid medicines.

4.2 Dose and method of administration

Route of administration: oral

Salbutamol has a duration of action of 4 to 6 hours in most patients.

Increasing use of beta-2 agonists may be a sign of worsening asthma.

Under these conditions a reassessment of the patient's therapy plan may be required and concomitant glucocorticosteroid therapy should be considered.

As there may be adverse effects associated with excessive dosing, the dosage or frequency of administration should only be increased on medical advice.

Dose

Adults:

The usual effective dose is 10 mL salbutamol (4 milligrams of salbutamol) 3 or 4 times per day. If adequate bronchodilation is not obtained each single dose may be gradually increased to as much as 20 mL of syrup (8 milligrams salbutamol).

Some patients obtain adequate relief with 5 mL of syrup (2 milligrams salbutamol) three or four times daily.

Paediatric population:

2-6 years: 2.5-5 mL of syrup (1-2 mg salbutamol) 3 or 4 times daily.

6-12 years: 5 mL of syrup (2 mg salbutamol) 3 or 4 times daily.

Over 12 years: 5-10 mL of syrup (2-4 mg salbutamol) 3 or 4 times daily.

Special patient groups:

In elderly patients or in those known to be unusually sensitive to beta-2 adrenergic stimulant medicines, it is advisable to initiate treatment with 5 mL of syrup (2 mg salbutamol) three or four times per day.

Method of administration

For instructions on the use and handling of this medicine, please see section 6.6 Special precautions for disposal and other handling.

4.3 Contraindications

VENTOLIN Syrup is contra-indicated in patients with a history of hypersensitivity to any of its components.

Oral salbutamol is contraindicated for use in obstetric indications including threatened abortion and management of premature labour.

4.4 Special warnings and precautions for use

The management of asthma should normally follow a stepwise programme, and patient response should be monitored clinically and by lung function tests.

Increasing use of short-acting inhaled beta-2 agonists to control symptoms indicates deterioration of asthma control. Under these conditions, the patient's therapy plan should be reassessed. Sudden and progressive deterioration in asthma control is potentially life threatening and consideration should be given to starting or increasing corticosteroid therapy. In patients considered at risk, daily peak flow monitoring may be instituted.

Patients should be warned that if either the usual relief is diminished or the usual duration of action reduced, they should not increase the dose or its frequency of administration, but should seek medical advice.

Salbutamol should be administered cautiously to patients with thyrotoxicosis.

Potentially serious hypokalaemia may result from beta-2 agonist therapy mainly from parenteral and nebulised administration. Particular caution is advised in acute severe asthma as this effect may be potentiated by concomitant treatment with xanthine derivatives, steroids, diuretics and by hypoxia. It is recommended that serum potassium levels are monitored in such situations.

In common with other beta-adrenoceptor agonists, VENTOLIN can induce reversible metabolic changes, for example increased blood sugar levels. The diabetic patient may be unable to compensate for this and the development of ketoacidosis has been reported. Concurrent administration of corticosteroids can exaggerate this effect.

4.5 Interaction with other medicines and other forms of interaction

Salbutamol and non-selective beta-blocking agents, such as propranolol, should not usually be prescribed together.

Salbutamol is not contra-indicated in patients under treatment with monoamine oxidase inhibitors (MAOIs).

4.6 Fertility, pregnancy and lactation

Pregnancy

Administration of medicines during pregnancy should only be considered if the expected benefit to the mother is greater than any possible risk to the foetus.

During worldwide marketing experience, rare cases of various congenital anomalies, including cleft palate and limb defects have been reported in the offspring of patients being treated with salbutamol. Some of the mothers were taking multiple medications during their pregnancies.

Because no consistent pattern of defects can be discerned, and baseline rate for congenital anomalies is 2-3%, a relationship with salbutamol use cannot be established.

Lactation

As salbutamol is probably secreted in breast milk its use in nursing mothers is not recommended unless the expected benefits outweigh any potential risk. It is not known whether salbutamol in breast milk has a harmful effect on the neonate.

Fertility

There is no information on the effects of salbutamol on human fertility. There were no adverse effects on fertility in animals (see Section 5.3 Pre-clinical safety data).

4.7 Effects on ability to drive and use machines

None known.

4.8 Undesirable effects

Summary of adverse reactions

Adverse reactions are listed below by system organ class and frequency.

Frequencies are defined as: very common ($\geq 1/10$), common ($\geq 1/100$ to $< 1/10$),

uncommon ($\geq 1/1000$ to $< 1/100$), rare ($\geq 1/10,000$ to $< 1/1000$) and very rare ($< 1/10,000$) including isolated reports. Very common and common reactions were generally determined from clinical trial data. Rare and very rare reactions were generally determined from spontaneous data.

Immune system disorders

Very rare: Hypersensitivity reactions including angioedema, urticaria, bronchospasm, hypotension and collapse.

Metabolism and nutrition disorders

Rare: Hypokalaemia.

Potentially serious hypokalaemia may result from beta-2 agonist therapy.

Nervous system disorders

Very common: Tremor.

Common: Headache.

Very rare: Hyperactivity.

Cardiac disorders

Common: Tachycardia, palpitations.

Rare: Cardiac arrhythmias including atrial fibrillation, supraventricular tachycardia and extrasystoles.

Vascular disorders

Rare: Peripheral vasodilatation.

Musculoskeletal and connective tissue disorders

Common: Muscle cramps.

Very rare: Feeling of muscle tension.

Reporting of suspected adverse reactions

Reporting suspected adverse reactions after authorisation of the medicine is important. It allows continued monitoring of the benefit/risk balance of the medicine. Healthcare professionals are asked to report any suspected adverse reactions via: <https://nzphvc.otago.ac.nz/reporting/>.

4.9 Overdose

The most common signs and symptoms of overdose with salbutamol are transient beta agonist pharmacologically mediated events (see Section 4.4 Special warnings and precautions for use and Section 4.8 Undesirable effects).

Hypokalaemia may occur following overdose with salbutamol. Serum potassium levels should be monitored.

Lactic acidosis has been reported in association with high therapeutic doses as well as overdoses of short-acting beta-agonist therapy, therefore monitoring for elevated serum lactate and consequent metabolic acidosis (particularly if there is persistence or worsening of tachypnoea despite resolution of other signs of bronchospasm such as wheezing) may be indicated in the setting of overdose.

Nausea, vomiting and hyperglycaemia have been reported, predominantly in children and when salbutamol overdose has been taken via the oral route.

Further management should be as clinically indicated or as recommended by the national poisons centre, where available.

For advice on the management of overdose please contact the National Poisons Centre on 0800 POISON (0800 764 766).

5. PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Selective beta-2-adrenoreceptor agonists,

ATC code: R03CC02

Mechanism of action Salbutamol is a selective beta-2 adrenoceptor agonist. At therapeutic doses it acts on the beta-2 receptors of bronchial muscle providing short acting (4 to 6 hour) bronchodilation in reversible airways obstruction.

5.2 Pharmacokinetic properties

Absorption

After oral administration, salbutamol is absorbed from the gastrointestinal tract and undergoes considerable first-pass metabolism to the phenolic sulphate. Both unchanged drug and conjugate are excreted primarily in the urine. The bioavailability of orally administered salbutamol is about 50%.

Distribution

Salbutamol is bound to plasma proteins to the extent of 10%.

Biotransformation/Elimination

Salbutamol administered intravenously has a half-life of 4 to 6 hours and is cleared partly renally and partly by metabolism to the inactive 4'-O- sulphate (phenolic sulphate) which is also excreted primarily in the urine.

The faeces are a minor route of excretion. The majority of a dose of salbutamol given intravenously, orally or by inhalation is excreted within 72 hours.

5.3 Pre-clinical safety data

In common with other potent selective beta-2 receptor agonists, salbutamol has been shown to be teratogenic in mice when given subcutaneously. In a reproductive study, 9.3% of foetuses are found to have cleft palate, at 2.5 mg/kg, 4 times the maximum human oral dose. In rats, treatment at the levels of 0.5, 2.32, 10.75 and 50 mg/kg/day

orally throughout pregnancy resulted in no significant foetal abnormalities. The only toxic effect was an increase in neonatal mortality at the highest dose level as the result of lack of maternal care. A reproductive study in rabbits revealed cranial malformations in 37% of foetuses at 50 mg/kg/day, 78 times the maximum human oral dose. Reproduction studies in rats demonstrated no evidence of impaired fertility at oral doses of salbutamol up to 50 mg/kg.

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Sodium citrate dihydrate

Citric acid monohydrate

Hypromellulose

Sodium benzoate

Saccharin sodium

Orange flavour

Sodium chloride

Purified water

6.2 Incompatibilities

Admixture of VENTOLIN Syrup with other liquid preparations is not recommended.

6.3 Shelf Life

3 years

6.4 Special precautions for storage

Store at a temperature not exceeding 30°C. Protect from light.

6.5 Nature and contents of container

VENTOLIN Syrup is supplied in 300 mL bottles.

6.6 Special precautions for disposal and other handling

Dilution

VENTOLIN Syrup may be diluted with Purified Water BP (50% v/v). The resulting mixture should be protected from light and used within 28 days.

A 50% v/v dilution of VENTOLIN Syrup has been shown to be adequately preserved against microbial contamination. However, to avoid the possibility of introducing excessive microbial contamination, the Purified Water used for dilution should be recently prepared or alternatively it should be boiled and cooled immediately before use.

Dilution of VENTOLIN Syrup with Syrup BP or Sorbitol solution is not recommended at this may result in precipitation of the cellulose thickening agent.

7. MEDICINE SCHEDULE

Prescription Only Medicine

8. SPONSOR

GlaxoSmithKline NZ Limited

Private Bag 106600

Downtown

Auckland

New Zealand

Phone: (09) 367 2900

Facsimile: (09) 367 2910

9. DATE OF FIRST APPROVAL

Date of publication in the New Zealand Gazette of consent to distribute the medicine:
29 July 1983

10. DATE OF REVISION OF THE TEXT

18 September 2019

Summary table of changes

Section changed	Summary of new information
Multiple	Trade name change from Ventolin Elixir to Ventolin Syrup Update of dosage form Editorial changes
	Revision of copyright statement

Version: 7.0

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