Salbutamol

Ventolin®

200mcg Rotacap®

Anti-asthma

PRODUCT DESCRIPTION

Salbutamol (as sulfate) *(Ventolin®) Rotacap®:* Each *Rotacap®* contains a mixture of 200mcg microfine salbutamol sulfate and large particle lactose (which contains milk protein) in hard gelatin cartridges.

PHARMACOLOGIC PROPERTIES

Pharmacodynamics

Salbutamol is a selective beta$_2$-adrenoceptor agonist. At therapeutic doses it acts on the beta$_2$-adrenoceptors of bronchial muscle providing short acting (4 to 6 hour) bronchodilation with a fast onset (within 5 minutes) in reversible airways obstruction.

Pharmacokinetics

Absorption

After administration by the inhaled route between 10 and 20% of the dose reaches the lower airways. The remainder is retained in the delivery system or is deposited in the oropharynx from where it is swallowed. The fraction deposited in the airways is absorbed into the pulmonary tissues and circulation but is not metabolised by the lung.

Distribution

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

Metabolism

On reaching the systemic circulation, salbutamol becomes accessible to hepatic metabolism and is excreted, primarily in the urine, as unchanged drug and as the phenolic sulphate.

The swallowed portion of an inhaled dose 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.

Elimination

Salbutamol administered intravenously has a half-life of four to six 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.

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 were found to have cleft palate, at 2.5 mg/kg, four times the maximum human oral dose. In rats, treatment at the levels of 0.5, 2.32, 10.75 and 50mg/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 50mg/kg/day, 78 times the maximum human oral dose.

In an oral fertility and general reproductive performance study in rats at doses of 2 and 50 mg/kg/day, with the exception of a reduction in number of weanlings surviving to day 21 post partum at 50 mg/kg/day, there were no adverse effects on fertility, embryofetal development, litter size, birth weight or growth rate.

INDICATIONS

Salbutamol is a selective beta$_2$ adrenoceptor agonist indicated for the treatment or prevention of bronchospasm. It provides short acting (four hours) bronchodilation in reversible airways obstruction due to asthma, chronic bronchitis and emphysema. For patients with asthma salbutamol may be used to relieve symptoms when they occur and to prevent them prior to a known trigger.

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

DOSAGE AND ADMINISTRATION

Salbutamol *(Ventolin®)* 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.

Salbutamol *(Ventolin®) Rotacaps®* capsules are for inhalation use only, using a *VENTOLIN® ROTAHALER®* inhaler.

RELIEF OF ACUTE BRONCHOSPASM

- **Adults**

200 or 400 micrograms.

- **Children**

200 micrograms.

PREVENTION OF ALLERGEN OR EXERCISE-INDUCED BRONCHOSPASM

- **Adults**

400 micrograms before challenge or exertion.

- **Children**

200 micrograms before challenge or exertion.

CHRONIC THERAPY

- **Adults**

400 micrograms 3 or 4 times daily

- **Children**

200 micrograms 3 or 4 times daily.

On demand use of Salbutamol *(Ventolin®)* should not exceed four times daily. Reliance on such supplementary use or a sudden increase in dose indicates deteriorating asthma (*see Warnings and Precautions*)

CONTRAINDICATIONS

Salbutamol *(Ventolin®)* is contraindicated in patients with a history of hypersensitivity to any of its components (*see Excipients*). Non-i.v. formulations of VENTOLIN must not be used to arrest uncomplicated premature labour or threatened abortion.

Salbutamol *(Ventolin®)* dry powder inhaler formulations are contraindicated in patients with severe milk-protein allergy or who have a history of hypersensitivity to salbutamol or any of its formulation components *(see Excipients).*

WARNINGS AND PRECAUTIONS

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 bronchodilators, in particular beta-2 agonists to relieve 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

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.

As with other inhalation therapy, paradoxical bronchospasm may occur, resulting in an immediate increase in wheezing after dosing. This should be treated immediately with an alternative presentation or a different fast-acting inhaled bronchodilator, if immediately available. The specific salbutamol presentation should be discontinued, and if necessary a different fast-acting bronchodilator instituted for ongoing use.

In the event of a previously effective dose of inhaled salbutamol failing to give relief for at least three hours, the patient should be advised to seek medical advice in order that any necessary additional steps may be taken.

Effects on Ability to Drive and Use Machines

None reported

DRUG INTERACTIONS

Salbutamol *(Ventolin®)* and non-selective beta-blocking drugs, such as propranolol, should not usually be prescribed together.

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

PREGNANCY AND LACTATION

Fertility

There is no information on the effects of salbutamol on human fertility. There were no adverse effects on fertility in animals (*see Pre-clinical Safety Data*).

Pregnancy

Administration of drugs 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. As no consistent pattern of defects can be discerned, and baseline rate for congenital anomalies is 2 to 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.

ADVERSE EFFECTS

Adverse events are listed below by system organ class and frequency. Frequencies are defined as: very common (≥1/10), common (≥1/100 to <1/10), uncommon (≥1/1000 to <1/100), rare (≥1/10,000 to <1/1000) and very rare (<1/10,000) including isolated reports. Very common and common events were generally determined from clinical trial data. Rare and very rare events 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

Common: Tremor, headache

Very rare: Hyperactivity

Cardiac disorders

Common: Tachycardia

Uncommon: Palpitations

Very rare: Cardiac arrhythmias including atrial fibrillation, supraventricular tachycardia and extrasystoles

Vascular disorders

Rare: Peripheral vasodilatation

Respiratory, thoracic and mediastinal disorders

Very rare: Paradoxical bronchospasm

Gastrointestinal disorders

Uncommon: Mouth and throat irritation

Musculoskeletal and connective tissue disorders

Uncommon: Muscle cramps

OVERDOSAGE AND TREATMENT

The most common signs and symptoms of overdose with Salbutamol *(Ventolin®)* are transient beta agonist pharmacologically mediated events (see Warnings and Precautions and Adverse Reactions).

Hypokalaemia may occur following overdosage with Salbutamol *(Ventolin®)*. 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 tachypnea despite resolution of other signs of bronchospasm such as wheezing) may be indicated in the setting of overdose.

STORAGE CONDITION

To keep the *Rotacap®* in good condition it is important that they are stored in a dry place and where they will not be exposed to extremes of temperature and should be stored below 30°C.

INSTRUCTIONS FOR USE/HANDLING

The *Rotacap®* must only be inserted in to the *Rotahaler®* immediately prior to use. Failure to observe this instruction will affect the delivery of the drug.

AVAILABILITY

Salbutamol *(Ventolin®) Rotacap®* 200mcg*:* Box of 10's and 128's

CAUTION

Foods, Drugs, Devices and Cosmetics Act prohibits dispensing without prescription.

Keep all medicines out of reach of children.

Version number: GDS25/IPI07 Revision date: 14 April 2014

Imported by:
GlaxoSmithKline Philippines Inc
2266 Chino Roces Avenue, City of Makati
Tel. 892-0761

Mfd. By:
GlaxoSmithKline Australia Pty Ltd
Boronia, Australia

Salbutamol
Ventolin®
200mcg Rotacap®

Salbutamol 200mcg and lactose in a gelatine capsule

Salbutamol *(Ventolin®) Rotacap®* helps to open up the airways in your lungs, making it easier for you to breathe. It helps to relieve chest tightness, wheezing and cough associated with asthma and is used to treat breathing problems in people with asthma.

Do not use Salbutamol *(Ventolin®) Rotacap®* if you are allergic (hypersensitive) to salbutamol sulfate, any of the other ingredients or have a severe allergy to milk proteins.

If you are pregnant, planning to become pregnant or breast feeding, talk to your doctor before taking Salbutamol *(Ventolin®) Rotacap®*.

BEFORE USE: Tell your doctor if you have an overactive thyroid gland, low blood potassium or if you are taking other medicines including beta-blockers for high blood pressure or a heart condition.

USE: Salbutamol *(Ventolin®) Rotacap®* capsules must only be used by inhalation from a *VENTOLIN® ROTAHALER®* – **Do not swallow**.
Adults: The starting dose is one to two inhalations (200-400mcg) once a day. The maximum dose is two inhalations (400mcg) four times a day.
Children: The starting dose is one inhalation (200mcg) once a day. The maximum dose is one inhalation (200mcg) four times a day.
Contact your doctor if you take too much Salbutamol *(Ventolin®)*.
Tell your doctor if your Salbutamol *(Ventolin®)* does not seem to be working as well as usual or if the effects last for less than 3 hours, as your chest problem may be getting worse and you may need a different medicine.
If your breathing or wheezing gets worse straight after using Salbutamol (Ventolin®) Rotacap®, stop using it, and contact your doctor immediately.

SIDE EFFECTS: The most common side effects are feeling shaky, headache and heart beating faster. Uncommon side effects are irregular heart beat (palpitations), mouth & throat irritation and muscle cramps. Rare side effects are low blood potassium level and increased blood flow to the extremities (widening of the blood vessels). Very rare side effects are feeling unusually restless or excitable and allergic reactions (skin rash, swelling of face/mouth, increased breathlessness or collapse). If you have an allergic reaction or other severe side effects contact your doctor immediately.

STORAGE: Do not store above 30°C. Store in a dry place. Keep out of reach of children.

Revision date: 14 April 2014

Salbutamol

Ventolin®

200mcg Rotacap®

Salbutamol 200mcg at *lactose* sa isang kapsulang *gelatine.*

Ang Salbutamol *(Ventolin®) Rotacap®* ay tumutulong para buksan ang mga daanan ng hangin sa baga, para maging mas maginhawa ang paghinga. Tumutulong itong paginhawahin ang paninikip ng dibdib, huni sa paghinga at ubong kaugnay ng hika at ginagamit ito para gamutin ang mga problema sa paghinga ng mga taong may hika.

Huwag gagamitin ang Salbutamol *(Ventolin®) Rotacap®* kung kayo ay *allergic* (sobrang sensitibo) sa *salbutamol sulfate* o alinman sa ibang mga sangkap o kung kayo ay may matinding *allergy* sa mga protina ng gatas.

Kung kayo ay buntis, nagbabalak magbuntis o magpasuso, kausapin muna ang doktor ninyo bago gumamit ng Salbutamol *(Ventolin®) Rotacap®*.

BAGO GAMITIN: Sabihin sa doktor ninyo kung kayo ay may sobrang aktibong *thyroid gland*, mababang *potassium* sa dugo o kung gumagamit kayo ng ibang mga gamot kabilang na ang *beta-blockers* para sa alta presyon o problema sa puso.

PAGGAMIT: Ang mga kapsula ng Salbutamol *(Ventolin®) Rotacap®* ay ginagamit lamang sa pamamagitan ng paghigop o *inhalation* mula sa isang *VENTOLIN® ROTAHALER®* – **Huwag lulunukin ang kapsula**.

Mga taong nasa hustong gulang: Ang panimulang dosis ay isa hanggang dalawang paghigop (200-400mcg) minsan sa isang araw. Ang pinakamataas na dosis ay dalawang paghigop (400mcg) apat na beses sa isang araw.
Mga bata: Ang panimulang dosis ay isang paghigop (200mcg) minsan sa isang araw. Ang pinakamataas na dosis ay isang paghigop (200mcg) apat na beses sa isang araw.

Kontakin ang doktor ninyo kung nakagamit kayo ng sobrang daming Salbutamol *(Ventolin®).*

Sabihin sa doktor ninyo kung ang Salbutamol *(Ventolin®)* ninyo ay parang hindi gumagana nang kasinghusay ng karaniwan o kung ang mga epekto ay tumatagal nang kulang sa 3 oras, dahil maaaring ang problema ninyo sa dibdib ay lumulubha at maaaring kailangan ninyo ng ibang gamot.

Kung ang paninikip o paghuni ng dibdib ay lumala pagkagamit ng Salbutamol (Ventolin®) Rotacap®, itigil kaagad ang paggamit nito at kontakin ang duktor ninyo sa madaling panahon.

MGA DI-KANAIS-NAIS NA EPEKTO O *SIDE EFFECTS*: Ang pinakakaraniwang *side effects* ay pakiramdam na mabubuway, pananakit ng ulo at mas mabilis na pagtibok ng puso. Ang hindi karaniwang *side effects* ay hindi regular na pagtibok ng puso (*palpitations*), iritasyon sa bibig at lalamunan at pamumulikat ng mga kalamnan. Ang bihirang *side effects* ay mababang antas ng *potassium* sa dugo at mas malakas na pagdaloy ng dugo sa mga kamay at paa o *extremities* (pagluwang ng mga ugat). Ang napakabihirang *side effects* ay hindi karaniwang pakiramdam na hindi mapalagay o magugulatin at mga *allergic* na reaksiyon (singaw sa balat, pamamaga ng mukha/bibig, mas malalang pangangapos ng hininga o pagkatumba *[collapse]*). Kung kayo ay may *allergic* na reaksiyon o ibang matitinding *side effects*, kontakin agad ang inyong doktor.

PAGTATAGO: Itago sa temperaturang hindi lalagpas sa 30°C sa isang tuyong lugar. Itago sa hindi maaabot ng mga bata.

Petsa ng version*:* 14 Abril 2014

PH/SAL/0041/15
August 2015
For Healthcare Professionals Only