of bronchodilation and systemic pharmacokinetics do not run in parallel.
Following inhalation dose portions from 10 to 30%, depending on the formulation and inhalation technique, are generally deposited in the lungs. The major part of the dose is swallowed and passes the gastro-intestinal tract.
Due to the negligible gastro-intestinal absorption of ipratropium bromide the bioavailability of the swallowed dose portion accounts for only ~2% of the dose. This fraction of the dose does not make a relevant contribution to the plasma concentrations of the active ingredient.
The portion of the dose deposited in the lungs reaches the circulation rapidly (within minutes) and has a nearly complete systemic availability.
From data of renal excretion (0-24 hrs) the total systemic bioavailability (pulmonary and gastro-intestinal portions) of inhaled doses of ipratropium bromide was estimated to be in the range 7 to 28%. It is assumed that this is also a valid range for the inhalation from the solution for inhalation preparation.
Kinetic parameters describing the disposition of ipratropium bromide were calculated from plasma concentrations after i.v. administration.
A rapid biphasic decline in plasma concentrations is observed. The volume of distribution (Vz) is 338 l (4.6 l/kg). The drug is minimally (less than 20%) bound to plasma proteins. The ipratropium ion does not cross the blood-brain barrier, consistent with the ammonium structure of the molecule.
The half-life of the terminal elimination phase is about 1.6 hours.
The mean total clearance of the drug is determined to be 2.3 L/min. The major portion of approximately 60% of the systemic available dose is eliminated by metabolic degradation, probably in the liver. The main urinary metabolites bind poorly to the muscarinic receptor and have to be regarded as ineffective.
A portion of approximately 40% of the systemic available dose is cleared via urinary excretion corresponding to an experimental renal clearance of 0.9 L/min. (After oral dosing less than 1% of the dose is renally excreted indicating an insignificant absorption of ipratropium bromide from the gastro-intestinal tract.) In excretion balance studies after intravenous administration of a radioactive dose less than 10% of the drug-related radioactivity (including parent compound and all metabolites) are excreted via the biliary-faecal route. The dominant excretion of drug-related radioactivity occurs via the kidneys.

**Indications**

ATROVENT 250 mcg unit dose vials are indicated, when used concomitantly with inhaled beta-agonists in the treatment of reversible airways obstruction as in acute and chronic asthma.

**Contraindications**

ATROVENT is contraindicated in patients with known hypersensitivity to atropine or its derivatives or to any other component of the product.

**Special Warnings and Precautions**

Use of the nebuliser solution should be subject to close medical supervision during initial dosing. ATROVENT should be used with caution in patients predisposed to narrow-angle glaucoma, or with prostatic hyperplasia or bladder-neck obstruction. Patients with cystic fibrosis may be more prone to gastro-intestinal motility disturbances. Immediate hypersensitivity reactions may occur after administration of ATROVENT, as demonstrated by rare cases of urticaria, angio-oedema, rash, bronchospasm, oropharyngeal oedema and anaphylaxis.

**Ocular complications**

There have been isolated reports of ocular complications (i.e. mydriasis, increased intraocular pressure, narrow-angle glaucoma, eye pain) when aerosolized ipratropium bromide either alone or in combination with an adrenergic beta2-agonist, has come into contact with the eyes. Eye pain or discomfort, blurred vision, visual halos or colored images in association with red eyes from conjunctival congestion and corneal oedema may be signs of acute narrow-angle glaucoma. Should any combination of these symptoms develop, treatment with miotic drops should be initiated and specialist advice sought immediately.

Patients must be instructed in the correct administration of ATROVENT solution for inhalation. Care must be taken not to allow the solution or mist into the eyes. It is recommended that the nebulized solution be administered via a mouth piece. If this is not available and a nebulizer mask is used, it must fit properly. Patients who may be predisposed to glaucoma should be warned specifically to protect their eyes.

**Drug Interactions**

Beta-adrenergics and xanthine preparations may intensify the bronchodilatory effect. The risk of acute glaucoma in patients with a history of narrow-angle glaucoma (see Special warnings and precautions) may be increased when nebulised ipratropium bromide and beta-mimetics are administered simultaneously.

**Pregnancy and Lactation**

The safety of ATROVENT during human pregnancy has not been established. The benefits of using ATROVENT during a confirmed or suspected pregnancy must be weighed against possible hazards to the unborn child. Preclinical studies have shown no embryotoxic or teratogenic effects following inhalation or intranasal application at doses considerably higher than those recommended in man. It is not known whether ATROVENT is excreted in breast milk. Although lipid-insoluble quaternary bases pass into breast milk, it is unlikely that ATROVENT would reach the infant to an important extent, when administered by inhalation. However, because many drugs are excreted in breast milk, caution should be exercised when ATROVENT is administered to a nursing woman.

**Side Effects**

The following side effects have been reported. The frequencies given below are based on clinical trials involving 3250 patients who have been treated with ATROVENT.

**Frequencies:**

Very common ≥1/10, Common ≥1/100<1/10,
Uncommon  $\geq$1/1,000<$1/100, Rare  $\geq$1/10,000
<1/1,000, Very rare <1/10,000

**Immune system disorders:**
Uncommon : Urticaria (including giant urticaria)
Rare: Anaphylactic reaction, Angio-oedema of tongue, lips, face

**Nervous system disorders:**
Common: Headache, Dizziness

**Eye Disorders:**
Uncommon: Ocular accommodation disturbances, Angle closure glaucoma (See Special Warnings and Precautions)
Rare: Intraocular pressure increased, eye pain, mydriasis (See Special Warnings and Precautions)

**Cardiac Disorders:**
Uncommon: Tachycardia
Rare: Palpitations, Supraventricular tachycardia, Atrial fibrillation

**Respiratory, Thoracic and mediastinal Disorders:**
Common: Cough, local irritation, Inhalation induced bronchospasm
Rare: Laryngospasm

**Gastro-intestinal Disorders:**
Common: Dryness of mouth, Vomiting, Gastrointestinal motility disorder (constipation, Diarrhea)
Rare: Nausea

**Skin and Subcutaneous Disorders:**
Uncommon: Skin rash, pruritis

**Renal and urinary Disorders:**
Rare: Urinary retention (the risk maybe increased in patients with pre-existing urinary outflow tract obstruction)

**Dosage & Administration**
The dosage should be adapted to the individual requirements of the patient; patients should also be kept under medical supervision during treatment. Unless otherwise prescribed, the following doses are recommended:

**Children 6 - 12 years:**
1 unit dose vial (UDV) ; repeated doses can be administered until the patient is stable. The time interval between the doses may be determined by the physician.
ATROVENT can be administered combined with an inhaled beta-agonist.

**Children under 6 years of age:**
Because there is limited information in this age group the following dose recommendation should be given under medical supervision:
1 unit dose vial; repeated doses can be administered until the patient is stable. The time interval between the doses may be determined by the physician.
ATROVENT can be administered combined with an inhaled beta-agonist.

The unit dose vials of 1ml are to be diluted with physiological saline up to a final volume of 2 - 4ml or may be combined with Berotec® solution for inhalation. Daily doses exceeding 1mg in children under 12 years of age should be given under medical supervision. It is advisable not to greatly exceed the recommended daily dose.

If therapy does not produce a significant improvement or if the patient’s condition gets worse, medical advice must be sought in order to determine a new plan of treatment. In the case of acute or rapidly worsening dyspnea (difficulty in breathing) a doctor should be consulted immediately. ATROVENT solution for inhalation can be administered using a range of commercially available nebulising devices. Where wall oxygen is available the solution is best administered at a flow rate of 6 - 8 litres per minute. ATROVENT solution for inhalation is suitable for concurrent inhalation with the secretomucolytics MUCOSOLVAN® solution for inhalation and BISOLVON solution for inhalation, and Berotec® solutions for inhalation.

ATROVENT UDVs and disodium cromoglycate inhalation solutions that contain the preservative benzalkonium chloride should not be administered simultaneously in the same nebuliser as precipitation may occur.
Instructions for use

The unit dose vials are intended only for inhalation with suitable nebulising devices and should not be taken orally or administered parenterally.

1. Prepare the nebuliser for filling, according to the instructions provided by the manufacturer or doctor.
2. Tear one unit dose vial from the strip.
3. Open the unit dose vial by firmly twisting the top.
4. Squeeze the content of the unit dose vial into the nebuliser reservoir.
5. Assemble the nebuliser and use as directed.
6. After use throw away any solution left in the reservoir and clean the nebuliser, following the manufacturer’s instructions.

Since the unit dose vials contain no preservative, it is important that the contents are used soon after opening and that a fresh vial is used for each administration to avoid microbial contamination. Partly used, opened or damaged unit dose vials should be discarded.

Overdosage

No symptoms specific to overdosage have been encountered. In view of the wide therapeutic range and topical administration of ATROVENT, no serious anticholinergic symptoms are to be expected. Minor systemic manifestations of anticholinergic action, including dry mouth, visual accommodation disturbances and increase of heart rate may occur.

Availability

Solution for inhalation in unit dose vials

Storage instructions

Store in a safe place below 30oC. Store in a safe place out of the reach of children! Do not take the medicine after the expiry date printed on the pack.
Pharmacokinetics

The therapeutic effect of ATROVENT is produced by a local action in the airways Therefore time courses of bronchodilation and systemic pharmacokinetics do not run in parallel.

Following inhalation dose portions from 10 to 30%, depending on the formulation and inhalation technique, are generally deposited in the lungs. The major part of the dose is swallowed and passes the gastro-intestinal tract.

Due to the negligible gastro-intestinal absorption of ipratropium bromide the bioavailability of the swallowed dose portion accounts for only ~2% of the dose. This fraction of the dose does not make a relevant contribution to the plasma concentrations of the active ingredient.

The portion of the dose deposited in the lungs reaches the circulation rapidly (within minutes) and has a nearly complete systemic availability.

From data of renal excretion (0-24 hrs) the total systemic bioavailability (pulmonary and gastro-intestinal portions) of inhaled doses of ipratropium bromide was estimated to be in the range 7 to 28%. It is assumed that this is also a valid range for the inhalation from the solution for inhalation preparation.

Kinetic parameters describing the disposition of ipratropium bromide were calculated from plasma concentrations after i.v. administration.

A rapid biphasic decline in plasma concentrations is observed. The volume of distribution (Vz) is 338 l ( 4.6 l/kg). The drug is minimally (less than 20%) bound to plasma proteins. The ipratropium ion does not cross the blood-brain barrier, consistent with the ammonium structure of the molecule.

The half-life of the terminal elimination phase is about 1.6 hours.

The mean total clearance of the drug is determined to be 2.3 L/min. The major portion of approximately 60% of the systemic available dose is eliminated by
Ocular complications
There have been isolated reports of ocular complications (i.e. mydriasis, increased intraocular pressure, narrow-angle glaucoma, eye pain) when aerosolized ipratropium bromide either alone or in combination with an adrenergic beta2-agonist, has come into contact with the eyes. Eye pain or discomfort, blurred vision, visual halos or colored images in association with red eyes from conjunctival congestion and corneal oedema may be signs of acute narrow-angle glaucoma. Should any combination of these symptoms develop, treatment with miotic drops should be initiated and specialist advice sought immediately.

Patients must be instructed in the correct administration of ATROVENT solution for inhalation. Care must be taken not to allow the solution or mist into the eyes. It is recommended that the nebulized solution is administered via a mouth piece. If this is not available and a nebulizer mask is used, it must fit properly. Patients who may be predisposed to glaucoma should be warned specifically to protect their eyes.

Drug Interactions
Beta-adrenergics and xanthine preparations may intensify the bronchodilatory effect. The risk of acute glaucoma in patients with a history of narrow-angle glaucoma (see Special warnings and precautions) may be increased when nebulised ipratropium bromide and beta-mimetics are administered simultaneously.

Pregnancy and Lactation
The safety of ATROVENT during human pregnancy has not been established. The benefits of using ATROVENT during a confirmed or suspected pregnancy must be weighed against possible hazards to the unborn child. Preclinical studies have shown no embryotoxic or teratogenic effects following inhalation or intranasal application at doses considerably higher than those recommended in man. It is not known whether ATROVENT is excreted into breast milk. Although lipid-insoluble quaternary cations pass into breast milk, it is unlikely that ATROVENT would reach the infant to an important extent, when administered by inhalation. However, because many

Indications
ATROVENT 500 mcg unit dose vials are indicated as a bronchodilator for maintenance treatment of bronchospasm associated with chronic obstructive pulmonary disease, including chronic bronchitis and emphysema.

ATROVENT 500 mcg unit dose vials are indicated, when used concomitantly with inhaled beta-agonists in the treatment of acute bronchospasm associated with chronic obstructive pulmonary disease including chronic bronchitis and asthma.

Contraindications
ATROVENT is contraindicated in patients with known hypersensitivity to atropine or its derivatives or to any other component of the product.

Special Warnings and Precautions
Use of the nebuliser solution should be subject to close medical supervision during initial dosing.

ATROVENT should be used with caution in patients predisposed to narrow-angle glaucoma, or with prostatic hyperplasia or bladder-neck obstruction.

Patients with cystic fibrosis may be more prone to gastro-intestinal motility disturbances.

Immediate hypersensitivity reactions may occur after administration of ATROVENT, as demonstrated by rare cases of urticaria, angio-oedema, rash, bronchospasm, oropharyngeal oedema and anaphylaxis.

metabolic degradation, probably in the liver. The main urinary metabolites bind poorly to the muscarinic receptor and have to be regarded as ineffective.

A portion of approximately 40% of the systemic available dose is cleared via urinary excretion corresponding to an experimental renal clearance of 0.9L/min. (After oral dosing less than 1% of the dose is rationally excreted indicating an insignificant absorption of ipratropium bromide from the gastro-intestinal tract.) In excretion balance studies after intravenous administration of a radioactive dose less than 10% of the drug-related radioactivity (including parent compound and all metabolites) are excreted via the biliary-faecal route. The dominant excretion of drug-related radioactivity occurs via the kidneys.

Ocular complications
There have been isolated reports of ocular complications (i.e. mydriasis, increased intraocular pressure, narrow-angle glaucoma, eye pain) when aerosolized ipratropium bromide either alone or in combination with an adrenergic beta2-agonist, has come into contact with the eyes. Eye pain or discomfort, blurred vision, visual halos or colored images in association with red eyes from conjunctival congestion and corneal oedema may be signs of acute narrow-angle glaucoma. Should any combination of these symptoms develop, treatment with miotic drops should be initiated and specialist advice sought immediately.

Patients must be instructed in the correct administration of ATROVENT solution for inhalation. Care must be taken not to allow the solution or mist into the eyes. It is recommended that the nebulized solution is administered via a mouth piece. If this is not available and a nebulizer mask is used, it must fit properly. Patients who may be predisposed to glaucoma should be warned specifically to protect their eyes.

Drug Interactions
Beta-adrenergics and xanthine preparations may intensify the bronchodilatory effect. The risk of acute glaucoma in patients with a history of narrow-angle glaucoma (see Special warnings and precautions) may be increased when nebulised ipratropium bromide and beta-mimetics are administered simultaneously.

Pregnancy and Lactation
The safety of ATROVENT during human pregnancy has not been established. The benefits of using ATROVENT during a confirmed or suspected pregnancy must be weighed against possible hazards to the unborn child. Preclinical studies have shown no embryotoxic or teratogenic effects following inhalation or intranasal application at doses considerably higher than those recommended in man. It is not known whether ATROVENT is excreted into breast milk. Although lipid-insoluble quaternary cations pass into breast milk, it is unlikely that ATROVENT would reach the infant to an important extent, when administered by inhalation. However, because many
drugs are excreted in breast milk, caution should be exercised when ATROVENT is administered to nursing mothers.

**Side Effects**
The following side effects have been reported. The frequencies given below are based on clinical trials involving 3250 patients who have been treated with ATROVENT.

**Frequencies:**
- Very common: ≥1/10
- Common: ≥1/100<1/10
- Uncommon: ≥1/1,000<1/100
- Rare: ≥1/10,000<1/1,000
- Very rare: <1/10,000

**Immune system disorders:**
- Uncommon: Urticaria (including giant urticaria)
- Rare: Anaphylactic reaction, Angio-oedema of tongue, lips, face

**Nervous system disorders:**
- Common: Headache, Dizziness

**Eye Disorders:**
- Uncommon: Ocular accommodation disturbances, Angle closure glaucoma (See Special Warnings and Precautions)
- Rare: Intraocular pressure increased, eye pain, mydriasis (See Special Warnings and Precautions)

**Cardiac Disorders:**
- Uncommon: Tachycardia
- Rare: Palpitations, Supraventricular tachycardia, Atrial fibrillation

**Respiratory, Thoracic and mediastinal Disorders:**
- Common: Cough, local irritation, Inhalation induced bronchospasm
- Rare: Laryngospasm

**Gastro-intestinal Disorders:**
- Common: Dryness of mouth, Vomiting, Gastrointestinal motility disorder (constipation, Diarrhea)
- Rare: Nausea

**Skin and Subcutaneous Disorders:**
- Uncommon: Skin rash, pruritis

**Renal and urinary Disorders:**
- Rare: Urinary retention (the risk maybe increased in patients with pre-existing urinary outflow tract obstruction)

**Dosage and Administration**
The dosage should be adapted to the individual requirements of the patient; patients should also be kept under medical supervision during treatment. Unless otherwise prescribed, the following doses are recommended:

**Maintenance treatment:**
- Adults (including elderly) and adolescents over 12 years of age:
  - 1 unit dose vial (UDV) 3 to 4 times daily

**Acute attacks:**
- Adults (including elderly) and adolescents over 12 years of age:
  - 1 unit dose vial (UDV); repeated doses can be administered until the patient is stable. The time interval between the doses may be determined by the physician. ATROVENT can be administered combined with an inhaled beta-agonist.
  - The unit dose vials of 1 ml are to be diluted with physiological saline up to a final volume of 2-4 ml or may be combined with Berotec® solution for inhalation.
  - Daily doses exceeding 2 mg in adults and children over 12 years of age should be given under medical supervision. It is advisable not to greatly exceed the recommended daily dose during either acute or maintenance treatment. If therapy does not produce a significant improvement or if the patient’s condition gets worse, medical advice must be sought in order to determine a new plan of treatment. In the case of acute or rapidly worsening dyspnea (difficulty in breathing) a doctor should be consulted immediately. ATROVENT solution for inhalation can be administered using a range of commercially available nebulising devices. Where wall oxygen is available the solution is best administered at a flow rate of 6 - 8 litres per minute. ATROVENT solution for inhalation is suitable for concurrent inhalation with the secretomucolytics MUCOSOLVAN® solution.
for inhalation and BISOLVON solution for inhalation, and Berotec® solution for inhalation.

ATROVENT UDVs and disodium cromoglycate inhalation solutions that contain the preservative benzalkonium chloride should not be administered simultaneously in the same nebuliser as precipitation may occur.

**Administration**

The unit dose vials are intended only for inhalation with suitable nebulising devices and should not be taken orally or administered parenterally.

1. Prepare the nebuliser for filling, according to the instructions provided by the manufacturer or doctor.
2. Tear one unit dose vial from the strip.
3. Open the unit dose vial by firmly twisting the top.
4. Squeeze the content of the unit dose vial into the nebuliser reservoir.
5. Assemble the nebuliser and use as directed.
6. After use throw away any solution left in the reservoir and clean the nebuliser, following the manufacturer’s instructions.

Since the unit dose vials contain no preservative, it is important that the contents are used soon after opening and that a fresh vial is used for each administration to avoid microbial contamination. Partly used, opened or damaged unit dose vials should be discarded.

**Overdosage**

No symptoms specific to overdosage have been encountered. In view of the wide therapeutic range and topical administration of ATROVENT no serious anticholinergic symptoms are to be expected. Minor systemic manifestations of anticholinergic action, including dry mouth, visual accommodation disturbances and increase of heart rate may occur.

**Availability**

Solution for inhalation in unit dose vials

**Storage instructions**

Store in a safe place below 30°C. Store in a safe place out of the reach of children! Do not take the medicine after the expiry date printed on the pack.
In controlled 90 day studies in patients with bronchospasm associated with asthma, significant improvements in pulmonary function (FEV1 increases of 15% or more) occurred in 40% of the patients. Preclinical and clinical evidence suggest no deleterious effect of ATROVENT on airway mucous secretion, mucociliary clearance or gas exchange.

Indications
ATROVENT metered aerosol is indicated as a bronchodilator for maintenance treatment of bronchospasm associated with chronic obstructive pulmonary disease, including chronic bronchitis, emphysema and asthma.

Contraindications
ATROVENT should not be taken by patients with known hypersensitivity to atropine or its derivatives or to any other component of the product.

Special warnings and precautions
When using the new formulation of ATROVENT for the first time, some patients may notice that the taste is slightly different from that of the CFC (chlorofluorocarbon) containing formulation. Patients should be made aware of this when changing from one formulation to the other. They should also be told that the formulations have been shown to be therapeutically equivalent.

ATROVENT is a quaternary ammonium compound with anticholinergic (parasympatholytic) properties. In preclinical studies, it appears to inhibit vagally mediated reflexes by antagonising the action of acetylcholine, the transmitter agent released from the vagus nerve. Anticholinergics prevent the increase in intracellular concentration of cyclic guanosine monophosphate (cyclic GMP) caused by interaction of acetylcholine with the muscarinic receptor on bronchial smooth muscle.

The bronchodilation following inhalation of ATROVENT is induced by local drug concentrations sufficient for anticholinergic efficacy at the bronchial smooth muscle and not by systemic drug concentrations.

In controlled 90 day studies in patients with bronchospasm associated with chronic obstructive pulmonary disease (chronic bronchitis and emphysema) significant improvements in pulmonary function (FEV1 and FEF25-75% increases of 15% or more) occurred within 15 minutes, reached a peak in 1-2 hours, and persisted in the majority of patients for up to 6 hours.

Ocular complications
There have been isolated reports of ocular complications (i.e. mydriasis, increased intraocular pressure,
Further, the following side effects have been observed with ATROVENT: increased heart rate, palpitations, supraventricular tachycardia and atrial fibrillation, ocular accommodation disturbances, nausea, urinary retention and dizziness. These side effects have been reversible. The risk of urinary retention may be increased in patients with pre-existing outflow tract obstruction. Ocular side effects have been reported (see: Special warnings and precautions).

As with other inhaled therapy including bronchodilators cough, local irritation and, inhalation induced bronchoconstriction have been observed. Allergic-type reactions such as skin rash, pruritis, angio-oedema of the tongue, lips and face, urticaria (including giant urticaria), laryngospasm and anaphylactic reactions may occur.

Dosage
The dosage should be adapted to the individual requirements. Unless otherwise prescribed, the following dosages are recommended for adults and school children: 2 metered doses (puffs) 4 times daily. Since a requirement for increasing doses suggests that additional therapeutic modalities may be needed, a total daily dose of 12 puffs should generally not be exceeded.

If therapy does not produce a significant improvement or if the patient’s condition gets worse, medical advice must be sought in order to determine a new plan of treatment. In the case of acute or rapidly worsening dyspnoea (difficulty in breathing) a doctor should be consulted immediately.

For acute exacerbations of chronic obstructive airways disease treatment with ATROVENT inhalation solution or unit dose vials may be indicated. Because of insufficient information in children ATROVENT metered aerosol should only be used on medical advice and under the supervision of an adult.

Administration
The correct administration of the metered aerosol is essential for successful therapy.
Depress the valve twice before the apparatus is used for the first time. Before each use the following rules should be observed:
1. Remove protective cap.
2. Breathe out deeply.
3. Hold the metered aerosol, and close lips over the mouthpiece. The arrow and the base of the container should be pointing upwards.
4. Breathe in as deeply as possible, pressing the base of the container firmly at the same time, this releases one metered dose. Hold the breath for a few seconds, then remove the mouthpiece and breathe out. The same action should be repeated for a second inhalation.
5. Replace the protective cap after use.
6. After not using the metered aerosol for three days the valve has to be actuated once.

The container is not transparent. It is not therefore possible to see when it is empty. The aerosol will deliver 200 doses. When these have all been used the aerosol may still appear to contain a small amount of fluid. The aerosol should, however, be replaced because you may not get the right amount of treatment.

The amount of treatment in your aerosol can be checked as follows:
Remove the aerosol from the plastic mouthpiece and put the aerosol into a container of water. The contents of the aerosol can be estimated by observing its position in the water.
The mouthpiece should always be kept clean and can be washed with warm water. If soap or detergent is used, the mouthpiece should be thoroughly rinsed in clear water.

WARNING: The plastic mouthpiece has been specially designed for use with ATROVENT metered aerosol to ensure that you always get the right amount of the medicine. The mouthpiece must never be used with any other metered aerosol nor must the ATROVENT metered aerosol be used with any mouthpiece other than the one supplied with the product. The container is under pressure and should by no account be opened by force or exposed to temperatures above 50°C.

Overdose
No symptoms specific to overdose have been encountered. In view of the wide therapeutic range and topical administration of ATROVENT, no serious anticholinergic symptoms are to be expected. Minor systemic manifestations of anticholinergic action, including dry mouth, visual accommodation disturbances and increase of heart rate may occur.

Availability
Metered aerosol

Storage instructions
Store below 30°C. Store in a safe place out of the reach of children! Do not take the medicine after the expiry date printed on the pack.