# ANNEX I SUMMARY OF PRODUCT CHARACTERISTICS

#### 1. NAME OF THE MEDICINAL PRODUCT

Aerius 5 mg film-coated tablets

# 2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each tablet contains 5 mg desloratadine.

### Excipient(s) with known effect

This medicinal product contains lactose (see section 4.4).

For the full list of excipients, see section 6.1.

#### 3. PHARMACEUTICAL FORM

Film-coated tablets

Light blue, round and embossed film-coated tablets with elongated letters "S" and "P" on one side and plain on the other. The diameter of the film-coated tablet is 6.5 mm.

#### 4. CLINICAL PARTICULARS

# 4.1 Therapeutic indications

Aerius is indicated in adults and adolescents aged 12 years and older for the relief of symptoms associated with:

- allergic rhinitis (see section 5.1)
- urticaria (see section 5.1)

#### 4.2 Posology and method of administration

#### **Posology**

Adults and adolescents (12 years of age and over)

The recommended dose of Aerius is one tablet once a day.

Intermittent allergic rhinitis (presence of symptoms for less than 4 days per week or for less than 4 weeks) should be managed in accordance with the evaluation of patient's disease history and the treatment could be discontinued after symptoms are resolved and reinitiated upon their reappearance. In persistent allergic rhinitis (presence of symptoms for 4 days or more per week and for more than 4 weeks), continued treatment may be proposed to the patients during the allergen exposure periods.

# Paediatric population

There is limited clinical trial efficacy experience with the use of desloratedine in adolescents 12 through 17 years of age (see sections 4.8 and 5.1).

The safety and efficacy of Aerius 5 mg film-coated tablets in children below the age of 12 years have not been established.

# Method of administration

Oral use.

The dose can be taken with or without food.

#### 4.3 Contraindications

Hypersensitivity to the active substance, to any of the excipients listed in section 6.1, or to loratadine.

# 4.4 Special warnings and precautions for use

#### Renal function impairment

In the case of severe renal insufficiency, Aerius should be used with caution (see section 5.2).

#### Seizures

Desloratadine should be administered with caution in patients with medical or familial history of seizures, and mainly young children (see section 4.8), being more susceptible to develop new seizures under desloratadine treatment. Healthcare providers may consider discontinuing desloratadine in patients who experience a seizure while on treatment.

#### Aerius tablet contains lactose

Patients with rare hereditary problems of galactose intolerance, the total lactase deficiency or glucose-galactose malabsorption should not take this medicinal product.

#### 4.5 Interaction with other medicinal products and other forms of interaction

No clinically relevant interactions were observed in clinical trials with deslorated in tablets in which erythromycin or ketoconazole were co-administered (see section 5.1).

#### Paediatric population

Interaction studies have only been performed in adults.

In a clinical pharmacology trial, Aerius tablets taken concomitantly with alcohol did not potentiate the performance impairing effects of alcohol (see section 5.1). However, cases of alcohol intolerance and intoxication have been reported during post-marketing use. Therefore, caution is recommended if alcohol is taken concomitantly.

#### 4.6 Fertility, pregnancy and lactation

#### Pregnancy

A large amount of data on pregnant women (more than 1,000 pregnancy outcomes) indicate no malformative nor foeto/ neonatal toxicity of desloratadine. Animal studies do not indicate direct or indirect harmful effects with respect to reproductive toxicity (see section 5.3). As a precautionary measure, it is preferable to avoid the use of Aerius during pregnancy.

#### **Breast-feeding**

Desloratadine has been identified in breastfed newborns/infants of treated women. The effect of desloratadine on newborns/infants is unknown. A decision must be made whether to discontinue breast-feeding or to discontinue/abstain from Aerius therapy taking into account the benefit of breast-feeding for the child and the benefit of therapy for the woman.

#### Fertility

There are no data available on male and female fertility.

# 4.7 Effects on ability to drive and use machines

Aerius has no or negligible influence on the ability to drive and use machines based on clinical trials. Patients should be informed that most people do not experience drowsiness. Nevertheless, as there is individual variation in response to all medicinal products, it is recommended that patients are advised not to engage in activities requiring mental alertness, such as driving a car or using machines, until they have established their own response to the medicinal product.

#### 4.8 Undesirable effects

#### Summary of the safety profile

In clinical trials in a range of indications including allergic rhinitis and chronic idiopathic urticaria, at the recommended dose of 5 mg daily, undesirable effects with Aerius were reported in 3 % of patients in excess of those treated with placebo. The most frequent of adverse reactions reported in excess of placebo were fatigue (1.2 %), dry mouth (0.8 %) and headache (0.6 %).

# Paediatric population

In a clinical trial with 578 adolescent patients, 12 through 17 years of age, the most common adverse event was headache; this occurred in 5.9 % of patients treated with desloratedine and 6.9 % of patients receiving placebo.

#### Tabulated list of adverse reactions

The frequency of the clinical trial adverse reactions reported in excess of placebo and other undesirable effects reported during the post-marketing period are listed in the following table. Frequencies are defined as very common ( $\geq 1/10$ ), common ( $\geq 1/100$  to < 1/10), uncommon ( $\geq 1/1000$ ), rare ( $\geq 1/10000$ ), rare ( $\geq 1/10000$ ), very rare (< 1/10000) and not known (cannot be estimated from the available data).

System Organ Class	Frequency	Adverse reactions seen with Aerius	
Metabolism and nutrition	Not known	Increased appetite	
disorders			
Psychiatric disorders	Very rare	Hallucinations	
	Not known	Abnormal behaviour, aggression,	
		depressed mood	
Nervous system disorders	Common	Headache	
	Very rare	Dizziness, somnolence, insomnia,	
		psychomotor hyperactivity, seizures	
Eye disorders	Not known	Eye dryness	
Cardiac disorders	Very rare	Tachycardia, palpitations	
	Not known	QT prolongation	
Gastrointestinal disorders	Common	Dry mouth	
	Very rare	Abdominal pain, nausea, vomiting,	
		dyspepsia, diarrhoea	
Hepatobiliary disorders	Very rare	Elevations of liver enzymes,	
		increased bilirubin, hepatitis	
	Not known	Jaundice	
Skin and subcutaneous tissue	Not known	Photosensitivity	
disorders			
Musculoskeletal and	Very rare	Myalgia	
connective tissue disorders			
General disorders and	Common	Fatigue	
administration site conditions	Very rare	Hypersensitivity reactions (such as	
		anaphylaxis, angioedema, dyspnoea,	
		pruritus, rash, and urticaria)	
	Not known	Asthenia	
Investigations	Not known	Weight increased	

#### Paediatric population

Other undesirable effects reported during the post-marketing period in paediatric patients with an unknown frequency included QT prolongation, arrhythmia, bradycardia, abnormal behaviour, and aggression.

A retrospective observational safety study indicated an increased incidence of new-onset seizure in patients 0 to 19 years of age when receiving deslorated ecompared with periods not receiving deslorated deslorated experiods. Among children 0-4 years old, the adjusted absolute increase was 37.5 (95 %

Confidence Interval (CI) 10.5-64.5) per 100,000 person years (PY) with a background rate of new onset seizure of 80.3 per 100,000 PY. Among patients 5-19 years of age, the adjusted absolute increase was 11.3 (95 % CI 2.3-20.2) per 100,000 PY with a background rate of 36.4 per 100,000 PY. (See section 4.4.)

### Reporting of suspected adverse reactions

Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions via the national reporting system listed in Appendix V.

#### 4.9 Overdose

The adverse event profile associated with overdosage, as seen during post-marketing use, is similar to that seen with therapeutic doses, but the magnitude of the effects can be higher.

#### Treatment

In the event of overdose, consider standard measures to remove unabsorbed active substance. Symptomatic and supportive treatment is recommended.

Desloratadine is not eliminated by haemodialysis; it is not known if it is eliminated by peritoneal dialysis.

#### **Symptoms**

Based on a multiple dose clinical trial, in which up to 45 mg of desloratadine was administered (nine times the clinical dose), no clinically relevant effects were observed.

#### Paediatric population

The adverse event profile associated with overdosage, as seen during post-marketing use, is similar to that seen with therapeutic doses, but the magnitude of the effects can be higher.

#### 5. PHARMACOLOGICAL PROPERTIES

#### 5.1 Pharmacodynamic properties

Pharmacotherapeutic group: antihistamines – H1 antagonist, ATC code: R06AX27

#### Mechanism of action

Desloratadine is a non-sedating, long-acting histamine antagonist with selective peripheral  $H_1$ -receptor antagonist activity. After oral administration, desloratadine selectively blocks peripheral histamine  $H_1$ -receptors because the substance is excluded from entry to the central nervous system.

Deslorated has demonstrated antiallergic properties from *in vitro* studies. These include inhibiting the release of proinflammatory cytokines such as IL-4, IL-6, IL-8, and IL-13 from human mast cells/basophils, as well as inhibition of the expression of the adhesion molecule P-selectin on endothelial cells. The clinical relevance of these observations remains to be confirmed.

#### Clinical efficacy and safety

In a multiple dose clinical trial, in which up to 20 mg of desloratadine was administered daily for 14 days, no statistically or clinically relevant cardiovascular effect was observed. In a clinical pharmacology trial, in which desloratadine was administered at a dose of 45 mg daily (nine times the clinical dose) for ten days, no prolongation of QTc interval was seen.

No clinically relevant changes in desloratadine plasma concentrations were observed in multiple-dose ketoconazole and erythromycin interaction trials.

#### Pharmacodynamic effects

Desloratadine does not readily penetrate the central nervous system. In controlled clinical trials, at the recommended dose of 5 mg daily, there was no excess incidence of somnolence as compared to placebo. Aerius given at a single daily dose of 7.5 mg did not affect psychomotor performance in clinical trials. In a single dose study performed in adults, desloratadine 5 mg did not affect standard measures of flight performance including exacerbation of subjective sleepiness or tasks related to flying.

In clinical pharmacology trials, co-administration with alcohol did not increase the alcohol-induced impairment in performance or increase in sleepiness. No significant differences were found in the psychomotor test results between desloratedine and placebo groups, whether administered alone or with alcohol.

In patients with allergic rhinitis, Aerius was effective in relieving symptoms such as sneezing, nasal discharge and itching, as well as ocular itching, tearing and redness, and itching of palate. Aerius effectively controlled symptoms for 24 hours.

# Paediatric population

The efficacy of Aerius tablets has not been clearly demonstrated in trials with adolescent patients 12 through 17 years of age.

In addition to the established classifications of seasonal and perennial, allergic rhinitis can alternatively be classified as intermittent allergic rhinitis and persistent allergic rhinitis according to the duration of symptoms. Intermittent allergic rhinitis is defined as the presence of symptoms for less than 4 days per week or for less than 4 weeks. Persistent allergic rhinitis is defined as the presence of symptoms for 4 days or more per week and for more than 4 weeks.

Aerius was effective in alleviating the burden of seasonal allergic rhinitis as shown by the total score of the rhino-conjunctivitis quality of life questionnaire. The greatest amelioration was seen in the domains of practical problems and daily activities limited by symptoms.

Chronic idiopathic urticaria was studied as a clinical model for urticarial conditions, since the underlying pathophysiology is similar, regardless of etiology, and because chronic patients can be more easily recruited prospectively. Since histamine release is a causal factor in all urticarial diseases, deslorated in expected to be effective in providing symptomatic relief for other urticarial conditions, in addition to chronic idiopathic urticaria, as advised in clinical guidelines.

In two placebo-controlled six week trials in patients with chronic idiopathic urticaria, Aerius was effective in relieving pruritus and decreasing the size and number of hives by the end of the first dosing interval. In each trial, the effects were sustained over the 24 hour dosing interval. As with other antihistamine trials in chronic idiopathic urticaria, the minority of patients who were identified as non-responsive to antihistamines was excluded. An improvement in pruritus of more than 50 % was observed in 55 % of patients treated with desloratadine compared with 19 % of patients treated with placebo. Treatment with Aerius also significantly reduced interference with sleep and daytime function, as measured by a four-point scale used to assess these variables.

# 5.2 Pharmacokinetic properties

#### Absorption

Desloratadine plasma concentrations can be detected within 30 minutes of administration. Desloratadine is well absorbed with maximum concentration achieved after approximately 3 hours; the terminal phase half-life is approximately 27 hours. The degree of accumulation of desloratadine was consistent with its half-life (approximately 27 hours) and a once daily dosing frequency. The bioavailability of desloratadine was dose proportional over the range of 5 mg to 20 mg.

In a pharmacokinetic trial in which patient demographics were comparable to those of the general seasonal allergic rhinitis population, 4 % of the subjects achieved a higher concentration of

desloratadine. This percentage may vary according to ethnic background. Maximum desloratadine concentration was about 3-fold higher at approximately 7 hours with a terminal phase half-life of approximately 89 hours. The safety profile of these subjects was not different from that of the general population.

#### Distribution

Desloratadine is moderately bound (83 % - 87 %) to plasma proteins. There is no evidence of clinically relevant medicine accumulation following once daily dosing of desloratadine (5 mg to 20 mg) for 14 days.

#### **Biotransformation**

The enzyme responsible for the metabolism of desloratedine has not been identified yet, and therefore, some interactions with other medicinal products cannot be fully excluded. Desloratedine does not inhibit CYP3A4 *in vivo*, and *in vitro* studies have shown that the medicinal product does not inhibit CYP2D6 and is neither a substrate nor an inhibitor of P-glycoprotein.

#### Elimination

In a single dose trial using a 7.5 mg dose of desloratadine, there was no effect of food (high-fat, high caloric breakfast) on the disposition of desloratadine. In another study, grapefruit juice had no effect on the disposition of desloratadine.

#### Renally impaired patients

The pharmacokinetics of desloratadine in patients with chronic renal insufficiency (CRI) was compared with that of healthy subjects in one single-dose study and one multiple dose study. In the single-dose study, the exposure to desloratadine was approximately 2 and 2.5-fold greater in subjects with mild to moderate and severe CRI, respectively, than in healthy subjects. In the multiple-dose study, steady state was reached after Day 11, and compared to healthy subjects the exposure to desloratadine was ~1.5-fold greater in subjects with mild to moderate CRI and ~2.5-fold greater in subjects with severe CRI. In both studies, changes in exposure (AUC and Cmax) of desloratadine and 3-hydroxydesloratadine were not clinically relevant.

#### 5.3 Preclinical safety data

Deslorated in is the primary active metabolite of lorated ine. Non-clinical studies conducted with deslorated ine and lorated ine demonstrated that there are no qualitative or quantitative differences in the toxicity profile of deslorated ine and lorated ine at comparable levels of exposure to deslorated ine.

Non-clinical data reveal no special hazard for humans based on conventional studies of safety pharmacology, repeated dose toxicity, genotoxicity, carcinogenic potential, toxicity to reproduction and development. The lack of carcinogenic potential was demonstrated in studies conducted with deslorated and loratedine.

#### 6. PHARMACEUTICAL PARTICULARS

# 6.1 List of excipients

Tablet core: calcium hydrogen phosphate dihydrate microcrystalline cellulose maize starch talc Tablet coating:

film coat (containing lactose monohydrate, hypromellose, titanium dioxide, macrogol 400, indigotin (E132))

clear coat (containing hypromellose, macrogol 400) carnauba wax

white wax

# 6.2 Incompatibilities

Not applicable.

#### 6.3 Shelf life

2 years

# 6.4 Special precautions for storage

Do not store above 30°C. Store in the original package.

# 6.5 Nature and contents of container

Aerius is supplied in blisters comprised of laminate blister film with foil lidding. The materials of the blister consist of a polychlorotrifluoroethylene (PCTFE)/Polyvinyl Chloride (PVC) film (product contact surface) with an aluminium foil lidding coated with a vinyl heat seal coat (product contact surface) which is heat sealed.

Packs of 1, 2, 3, 5, 7, 10, 14, 15, 20, 21, 30, 50, 90, 100 tablets.

Not all pack sizes may be marketed.

#### 6.6 Special precautions for disposal

No special requirements.

# 7. MARKETING AUTHORISATION HOLDER

N.V. Organon Kloosterstraat 6 5349 AB Oss The Netherlands

# 8. MARKETING AUTHORISATION NUMBER(S)

EU/1/00/160/001-013 EU/1/00/160/036

# 9. DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

Date of first authorisation: 15 January 2001 Date of latest renewal: 15 January 2006

### 10. DATE OF REVISION OF THE TEXT

Detailed information on this medicinal product is available on the website of the European Medicines Agency <a href="http://www.ema.europa.eu">http://www.ema.europa.eu</a>.

#### 1. NAME OF THE MEDICINAL PRODUCT

Aerius 0.5 mg/ml oral solution

# 2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each ml of oral solution contains 0.5 mg desloratadine.

### Excipient(s) with known effect

This medicinal product contains sorbitol (E420), propylene glycol (E1520) and benzyl alcohol (see section 4.4).

For the full list of excipients, see section 6.1.

### 3. PHARMACEUTICAL FORM

Oral solution is a clear, colourless solution.

#### 4. CLINICAL PARTICULARS

#### 4.1 Therapeutic indications

Aerius is indicated in adults, adolescents and children over the age of 1 year for the relief of symptoms associated with:

- allergic rhinitis (see section 5.1)
- urticaria (see section 5.1)

# 4.2 Posology and method of administration

#### Posology

Adults and adolescents (12 years of age and over)

The recommended dose of Aerius is 10 ml (5 mg) oral solution once a day.

# Paediatric population

The prescriber should be aware that most cases of rhinitis below 2 years of age are of infectious origin (see section 4.4) and there are no data supporting the treatment of infectious rhinitis with Aerius.

Children 1 through 5 years of age: 2.5 ml (1.25 mg) Aerius oral solution once a day.

Children 6 through 11 years of age: 5 ml (2.5 mg) Aerius oral solution once a day.

The safety and efficacy of Aerius 0.5 mg/ml oral solution in children below the age of 1 year have not been established.

There is limited clinical trial efficacy experience with the use of desloratadine in children 1 through 11 years of age and adolescents 12 through 17 years of age (see sections 4.8 and 5.1).

Intermittent allergic rhinitis (presence of symptoms for less than 4 days per week or for less than 4 weeks) should be managed in accordance with the evaluation of patient's disease history and the treatment could be discontinued after symptoms are resolved and reinitiated upon their reappearance. In persistent allergic rhinitis (presence of symptoms for 4 days or more per week and for more than 4 weeks), continued treatment may be proposed to the patients during the allergen exposure periods.

### Method of administration

Oral use.

The dose can be taken with or without food.

#### 4.3 Contraindications

Hypersensitivity to the active substance, to any of the excipients listed in section 6.1, or to loratadine.

### 4.4 Special warnings and precautions for use

### Renal function impairment

In the case of severe renal insufficiency, Aerius should be used with caution (see section 5.2).

#### Seizures

Desloratadine should be administered with caution in patients with medical or familial history of seizures, and mainly young children (see section 4.8), being more susceptible to develop new seizures under desloratadine treatment. Healthcare providers may consider discontinuing desloratadine in patients who experience a seizure while on treatment.

#### Aerius oral solution contains sorbitol (E420)

This medicinal product contains 150 mg sorbitol (E420) in each ml of oral solution.

The additive effect of concomitantly administered products containing sorbitol (E420) (or fructose) and dietary intake of sorbitol (E420) (or fructose) should be taken into account. The content of sorbitol (E420) in medicinal products for oral use may affect the bioavailability of other medicinal products for oral use administered concomitantly.

Sorbitol is a source of fructose; patients with hereditary fructose intolerance (HFI) should not take this medicinal product.

# Aerius oral solution contains propylene glycol (E1520)

This medicinal product contains 100.75 mg propylene glycol (E1520) in each ml of oral solution.

#### Aerius oral solution contains sodium

This medicinal product contains less than 1 mmol sodium (23 mg) per dose, that is to say essentially 'sodium-free'.

#### Aerius oral solution contains benzyl alcohol

This medicinal product contains 0.75 mg benzyl alcohol in each ml of oral solution.

Benzyl alcohol may cause anaphylactoid reactions.

Increased risk due to accumulation in young children. It is not recommended to be used for more than a week in young children (less than 3 years old).

High volumes should be used with caution and only if necessary, especially in subjects with liver or kidney impairment because of the risk of accumulation and toxicity (metabolic acidosis).

#### Paediatric population

In children below 2 years of age, the diagnosis of allergic rhinitis is particularly difficult to distinguish from other forms of rhinitis. The absence of upper respiratory tract infection or structural abnormalities, as well as patient history, physical examinations, and appropriate laboratory and skin tests should be considered.

Approximately 6 % of adults and children 2- to 11-year old are phenotypic poor metabolisers of desloratedine and exhibit a higher exposure (see section 5.2). The safety of desloratedine in children 2-

to 11-years of age who are poor metabolisers is the same as in children who are normal metabolisers. The effects of deslorated in poor metabolisers < 2 years of age have not been studied.

### 4.5 Interaction with other medicinal products and other forms of interaction

No clinically relevant interactions were observed in clinical trials with deslorated in tablets in which erythromycin or ketoconazole were co-administered (see section 5.1).

#### Paediatric population

Interaction studies have only been performed in adults.

In a clinical pharmacology trial, Aerius tablets taken concomitantly with alcohol did not potentiate the performance impairing effects of alcohol (see section 5.1). However, cases of alcohol intolerance and intoxication have been reported during post-marketing use. Therefore, caution is recommended if alcohol is taken concomitantly.

# 4.6 Fertility, pregnancy and lactation

#### Pregnancy

A large amount of data on pregnant women (more than 1,000 pregnancy outcomes) indicate no malformative nor foeto/ neonatal toxicity of desloratadine. Animal studies do not indicate direct or indirect harmful effects with respect to reproductive toxicity (see section 5.3). As a precautionary measure, it is preferable to avoid the use of Aerius during pregnancy.

#### Breast-feeding

Desloratadine has been identified in breastfed newborns/infants of treated women. The effect of desloratadine on newborns/infants is unknown. A decision must be made whether to discontinue breast-feeding or to discontinue/abstain from Aerius therapy taking into account the benefit of breast-feeding for the child and the benefit of therapy for the woman.

#### <u>Fertility</u>

There are no data available on male and female fertility.

#### 4.7 Effects on ability to drive and use machines

Aerius has no or negligible influence on the ability to drive and use machines based on clinical trials. Patients should be informed that most people do not experience drowsiness. Nevertheless, as there is individual variation in response to all medicinal products, it is recommended that patients are advised not to engage in activities requiring mental alertness, such as driving a car or using machines, until they have established their own response to the medicinal product.

### 4.8 Undesirable effects

# Summary of the safety profile

# Paediatric population

In clinical trials in a paediatric population, the desloratedine syrup formulation was administered to a total of 246 children aged 6 months through 11 years. The overall incidence of adverse events in children 2 through 11 years of age was similar for the desloratedine and the placebo groups. In infants and toddlers aged 6 to 23 months, the most frequent adverse reactions reported in excess of placebo were diarrhoea (3.7 %), fever (2.3 %) and insomnia (2.3 %). In an additional study, no adverse events were seen in subjects between 6 and 11 years of age following a single 2.5 mg dose of desloratedine oral solution.

In a clinical trial with 578 adolescent patients, 12 through 17 years of age, the most common adverse event was headache; this occurred in 5.9 % of patients treated with desloratedine and 6.9 % of patients receiving placebo.

#### Adults and adolescents

At the recommended dose, in clinical trials involving adults and adolescents in a range of indications including allergic rhinitis and chronic idiopathic urticaria, undesirable effects with Aerius were reported in 3 % of patients in excess of those treated with placebo. The most frequent of adverse events reported in excess of placebo were fatigue (1.2 %), dry mouth (0.8 %) and headache (0.6 %).

# <u>Tabulated list of adverse reactions</u>

The frequency of the clinical trial adverse reactions reported in excess of placebo and other undesirable effects reported during the post-marketing period are listed in the following table. Frequencies are defined as very common ( $\geq 1/10$ ), common ( $\geq 1/100$  to < 1/10), uncommon ( $\geq 1/1000$ ), rare ( $\geq 1/10000$ ), rare ( $\geq 1/10000$ ), very rare (< 1/10000) and not known (cannot be estimated from the available data).

System Organ Class	Frequency	Adverse reactions seen with Aerius	
Metabolism and nutrition	Not known	Increased appetite	
disorders			
Psychiatric disorders	Very rare	Hallucinations	
	Not known	Abnormal behaviour, aggression,	
		depressed mood	
Nervous system disorders	Common	Headache	
	Common (children less	Insomnia	
	than 2 years)		
	Very rare	Dizziness, somnolence, insomnia,	
	·	psychomotor hyperactivity, seizures	
Eye disorders	Not known	Eye dryness	
Cardiac disorders	Very rare	Tachycardia, palpitations	
	Not known	QT prolongation	
Gastrointestinal disorders	Common	Dry mouth	
	Common (children less	Diarrhoea	
	than 2 years)		
	Very rare	Abdominal pain, nausea, vomiting,	
		dyspepsia, diarrhoea	
Hepatobiliary disorders	Very rare	Elevations of liver enzymes, increased	
		bilirubin, hepatitis	
	Not known	Jaundice	
Skin and subcutaneous tissue	Not known	Photosensitivity	
disorders			
Musculoskeletal and	Very rare	Myalgia	
connective tissue disorders			
General disorders and	Common	Fatigue	
administration site conditions	Common (children less	Fever	
	than 2 years)		
	Very rare	Hypersensitivity reactions (such as	
		anaphylaxis, angioedema, dyspnoea,	
		pruritus, rash, and urticaria)	
	Not known	Asthenia	
Investigations	Not known	Weight increased	

#### Paediatric population

Other undesirable effects reported during the post-marketing period in paediatric patients with an unknown frequency included QT prolongation, arrhythmia, bradycardia, abnormal behaviour, and aggression.

A retrospective observational safety study indicated an increased incidence of new-onset seizure in patients 0 to 19 years of age when receiving deslorated ecompared with periods not receiving deslorated deslorated experiods. Among children 0-4 years old, the adjusted absolute increase was 37.5 (95 %

Confidence Interval (CI) 10.5-64.5) per 100,000 person years (PY) with a background rate of new onset seizure of 80.3 per 100,000 PY. Among patients 5-19 years of age, the adjusted absolute increase was 11.3 (95 % CI 2.3-20.2) per 100,000 PY with a background rate of 36.4 per 100,000 PY. (See section 4.4.)

# Reporting of suspected adverse reactions

Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions via the national reporting system listed in Appendix V.

#### 4.9 Overdose

The adverse event profile associated with overdosage, as seen during post-marketing use, is similar to that seen with therapeutic doses, but the magnitude of the effects can be higher.

#### **Treatment**

In the event of overdose, consider standard measures to remove unabsorbed active substance. Symptomatic and supportive treatment is recommended.

Desloratadine is not eliminated by haemodialysis; it is not known if it is eliminated by peritoneal dialysis.

# **Symptoms**

Based on a multiple dose clinical trial in adults and adolescents, in which up to 45 mg of desloratadine was administered (nine times the clinical dose), no clinically relevant effects were observed.

#### Paediatric population

The adverse event profile associated with overdosage, as seen during post-marketing use, is similar to that seen with therapeutic doses, but the magnitude of the effects can be higher.

#### 5. PHARMACOLOGICAL PROPERTIES

#### 5.1 Pharmacodynamic properties

Pharmacotherapeutic group: antihistamines – H<sub>1</sub> antagonist, ATC code: R06AX27

#### Mechanism of action

Desloratadine is a non-sedating, long-acting histamine antagonist with selective peripheral  $H_1$ -receptor antagonist activity. After oral administration, desloratadine selectively blocks peripheral histamine  $H_1$ -receptors because the substance is excluded from entry to the central nervous system.

Deslorated has demonstrated antiallergic properties from *in vitro* studies. These include inhibiting the release of proinflammatory cytokines such as IL-4, IL-6, IL-8, and IL-13 from human mast cells/basophils, as well as inhibition of the expression of the adhesion molecule P-selectin on endothelial cells. The clinical relevance of these observations remains to be confirmed.

# Clinical efficacy and safety

#### Paediatric population

Efficacy of Aerius oral solution has not been investigated in separate paediatric trials. However, the safety of desloratadine syrup formulation, which contains the same concentration of desloratadine as Aerius oral solution, was demonstrated in three paediatric trials. Children, 1-11 years of age, who were candidates for antihistamine therapy received a daily desloratadine dose of 1.25 mg (1 through 5 years of age) or 2.5 mg (6 through 11 years of age). Treatment was well tolerated as documented by clinical laboratory tests, vital signs, and ECG interval data, including QTc. When given at the recommended

doses, the plasma concentrations of desloratedine (see section 5.2) were comparable in the paediatric and adult populations. Thus, since the course of allergic rhinitis/chronic idiopathic urticaria and the profile of desloratedine are similar in adults and paediatric patients, desloratedine efficacy data in adults can be extrapolated to the paediatric population.

Efficacy of Aerius syrup has not been investigated in paediatric trials in children less than 12 years of age.

# Adults and adolescents

In a multiple dose clinical trial, in adults and adolescents, in which up to 20 mg of desloratedine was administered daily for 14 days, no statistically or clinically relevant cardiovascular effect was observed. In a clinical pharmacology trial, in adults and adolescents, in which desloratedine was administered to adults at a dose of 45 mg daily (nine times the clinical dose) for ten days, no prolongation of OTc interval was seen.

#### Pharmacodynamic effects

Desloratadine does not readily penetrate the central nervous system. In controlled clinical trials, at the recommended dose of 5 mg daily for adults and adolescents, there was no excess incidence of somnolence as compared to placebo. Aerius tablets given at a single daily dose of 7.5 mg to adults and adolescents did not affect psychomotor performance in clinical trials. In a single dose study performed in adults, desloratadine 5 mg did not affect standard measures of flight performance including exacerbation of subjective sleepiness or tasks related to flying.

In clinical pharmacology trials in adults, co-administration with alcohol did not increase the alcohol-induced impairment in performance or increase in sleepiness. No significant differences were found in the psychomotor test results between desloratedine and placebo groups, whether administered alone or with alcohol.

No clinically relevant changes in desloratadine plasma concentrations were observed in multiple-dose ketoconazole and erythromycin interaction trials.

In adult and adolescent patients with allergic rhinitis, Aerius tablets were effective in relieving symptoms such as sneezing, nasal discharge and itching, as well as ocular itching, tearing and redness, and itching of palate. Aerius effectively controlled symptoms for 24 hours. The efficacy of Aerius tablets has not been clearly demonstrated in trials with adolescent patients 12 through 17 years of age.

In addition to the established classifications of seasonal and perennial, allergic rhinitis can alternatively be classified as intermittent allergic rhinitis and persistent allergic rhinitis according to the duration of symptoms. Intermittent allergic rhinitis is defined as the presence of symptoms for less than 4 days per week or for less than 4 weeks. Persistent allergic rhinitis is defined as the presence of symptoms for 4 days or more per week and for more than 4 weeks.

Aerius tablets were effective in alleviating the burden of seasonal allergic rhinitis as shown by the total score of the rhino-conjunctivitis quality of life questionnaire. The greatest amelioration was seen in the domains of practical problems and daily activities limited by symptoms.

Chronic idiopathic urticaria was studied as a clinical model for urticarial conditions, since the underlying pathophysiology is similar, regardless of etiology, and because chronic patients can be more easily recruited prospectively. Since histamine release is a causal factor in all urticarial diseases, deslorated in expected to be effective in providing symptomatic relief for other urticarial conditions, in addition to chronic idiopathic urticaria, as advised in clinical guidelines.

In two placebo-controlled six week trials in patients with chronic idiopathic urticaria, Aerius was effective in relieving pruritus and decreasing the size and number of hives by the end of the first dosing interval. In each trial, the effects were sustained over the 24 hour dosing interval. As with other antihistamine trials in chronic idiopathic urticaria, the minority of patients who were identified as non-responsive to antihistamines was excluded. An improvement in pruritus of more than 50 % was

observed in 55 % of patients treated with deslorated compared with 19 % of patients treated with placebo. Treatment with Aerius also significantly reduced interference with sleep and daytime function, as measured by a four-point scale used to assess these variables.

### **5.2** Pharmacokinetic properties

# **Absorption**

Desloratadine plasma concentrations can be detected within 30 minutes of desloratadine administration in adults and adolescents. Desloratadine is well absorbed with maximum concentration achieved after approximately 3 hours; the terminal phase half-life is approximately 27 hours. The degree of accumulation of desloratadine was consistent with its half-life (approximately 27 hours) and a once daily dosing frequency. The bioavailability of desloratadine was dose proportional over the range of 5 mg to 20 mg.

In a series of pharmacokinetic and clinical trials, 6 % of the subjects reached a higher concentration of desloratedine. The prevalence of this poor metaboliser phenotype was comparable for adult (6 %) and paediatric subjects 2- to 11-year old (6 %), and greater among Blacks (18 % adult, 16 % paediatric) than Caucasians (2 % adult, 3 % paediatric) in both populations.

In a multiple-dose pharmacokinetic study conducted with the tablet formulation in healthy adult subjects, four subjects were found to be poor metabolisers of desloratedine. These subjects had a  $C_{max}$  concentration about 3-fold higher at approximately 7 hours with a terminal phase half-life of approximately 89 hours.

Similar pharmacokinetic parameters were observed in a multiple-dose pharmacokinetic study conducted with the syrup formulation in paediatric poor metaboliser subjects 2- to 11-year old diagnosed with allergic rhinitis. The exposure (AUC) to deslorated was about 6-fold higher and the  $C_{max}$  was about 3 to 4 fold higher at 3-6 hours with a terminal half-life of approximately 120 hours. Exposure was the same in adult and paediatric poor metabolisers when treated with age-appropriate doses. The overall safety profile of these subjects was not different from that of the general population. The effects of deslorated in poor metabolizers < 2 years of age have not been studied.

In separate single dose studies, at the recommended doses, paediatric patients had comparable AUC and  $C_{max}$  values of deslorated to those in adults who received a 5 mg dose of deslorated in syrup.

#### **Distribution**

Deslorated is moderately bound (83 % - 87 %) to plasma proteins. There is no evidence of clinically relevant active substance accumulation following once daily adult and adolescent dosing of deslorated (5 mg to 20 mg) for 14 days.

In a single dose, crossover study of desloratadine, the tablet and the syrup formulations were found to be bioequivalent. As Aerius oral solution contains the same concentration of desloratadine, no bioequivalence study was required and it is expected to be equivalent to the syrup and tablet.

# **Biotransformation**

The enzyme responsible for the metabolism of desloratedine has not been identified yet, and therefore, some interactions with other medicinal products cannot be fully excluded. Desloratedine does not inhibit CYP3A4 *in vivo*, and *in vitro* studies have shown that the medicinal product does not inhibit CYP2D6 and is neither a substrate nor an inhibitor of P-glycoprotein.

# **Elimination**

In a single dose trial using a 7.5 mg dose of desloratadine, there was no effect of food (high-fat, high caloric breakfast) on the disposition of desloratadine. In another study, grapefruit juice had no effect on the disposition of desloratadine.

### Renally impaired patients

The pharmacokinetics of desloratadine in patients with chronic renal insufficiency (CRI) was compared with that of healthy subjects in one single-dose study and one multiple dose study. In the single-dose study, the exposure to desloratadine was approximately 2 and 2.5-fold greater in subjects with mild to moderate and severe CRI, respectively, than in healthy subjects. In the multiple-dose study, steady state was reached after Day 11, and compared to healthy subjects the exposure to desloratadine was ~1.5-fold greater in subjects with mild to moderate CRI and ~2.5-fold greater in subjects with severe CRI. In both studies, changes in exposure (AUC and  $C_{max}$ ) of desloratadine and 3-hydroxydesloratadine were not clinically relevant.

#### 5.3 Preclinical safety data

Desloratadine is the primary active metabolite of loratadine. Non-clinical studies conducted with desloratadine and loratadine demonstrated that there are no qualitative or quantitative differences in the toxicity profile of desloratadine and loratadine at comparable levels of exposure to desloratadine.

Non-clinical data reveal no special hazard for humans based on conventional studies of safety pharmacology, repeated dose toxicity, genotoxicity, carcinogenic potential, toxicity to reproduction and development. The lack of carcinogenic potential was demonstrated in studies conducted with deslorated and loratedine.

#### 6. PHARMACEUTICAL PARTICULARS

# 6.1 List of excipients

sorbitol (E420)
propylene glycol (E1520)
sucralose (E955)
hypromellose 2910
sodium citrate dihydrate
natural and artificial flavour (bubblegum, which contains propylene glycol (E1520) and benzyl alcohol)
citric acid anhydrous
disodium edetate
purified water

#### 6.2 Incompatibilities

Not applicable.

#### 6.3 Shelf life

2 years

# **6.4** Special precautions for storage

Do not freeze. Store in the original package.

# 6.5 Nature and contents of container

Aerius oral solution, is supplied in 30, 50, 60, 100, 120, 150, 225 and 300 ml size Type III amber glass bottles closed with a plastic child resistant (C/R) screw closure having a multi-ply polyethylene-faced liner. All packages except the 150 ml package are supplied with a measuring spoon marked for doses of 2.5 ml and 5 ml. For the 150 ml package, a measuring spoon or an oral measuring syringe is provided, marked for doses of 2.5 ml and 5 ml.

Not all pack sizes may be marketed.

# 6.6 Special precautions for disposal

No special requirements.

# 7. MARKETING AUTHORISATION HOLDER

N.V. Organon Kloosterstraat 6 5349 AB Oss The Netherlands

# 8. MARKETING AUTHORISATION NUMBER(S)

EU/1/00/160/061-069

# 9. DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

Date of first authorisation: 15 January 2001 Date of latest renewal: 15 January 2006

# 10. DATE OF REVISION OF THE TEXT

Detailed information on this medicinal product is available on the website of the European Medicines Agency <a href="http://www.ema.europa.eu">http://www.ema.europa.eu</a>.

# **ANNEX II**

- A. MANUFACTURER(S) RESPONSIBLE FOR BATCH RELEASE
- B. CONDITIONS OR RESTRICTIONS REGARDING SUPPLY AND USE
- C. OTHER CONDITIONS AND REQUIREMENTS OF THE MARKETING AUTHORISATION
- D. CONDITIONS OR RESTRICTIONS WITH REGARD TO THE SAFE AND EFFECTIVE USE OF THE MEDICINAL PRODUCT

#### A. MANUFACTURER(S) RESPONSIBLE FOR BATCH RELEASE

Name and address of the manufacturer responsible for batch release for film-coated tablets

Organon Heist bv Industriepark 30 2220 Heist-op-den-Berg Belgium

Name and address of the manufacturer responsible for batch release for oral solution

Organon Heist bv Industriepark 30 2220 Heist-op-den-Berg Belgium

#### B. CONDITIONS OR RESTRICTIONS REGARDING SUPPLY AND USE

Medicinal product subject to medical prescription.

# C. OTHER CONDITIONS AND REQUIREMENTS OF THE MARKETING AUTHORISATION

• Periodic safety update reports (PSURs)

The requirements for submission of PSURs for this medicinal product are set out in the list of Union reference dates (EURD list) provided for under Article 107c(7) of Directive 2001/83/EC and any subsequent updates published on the European medicines web-portal.

# D. CONDITIONS OR RESTRICTIONS WITH REGARD TO THE SAFE AND EFFECTIVE USE OF THE MEDICINAL PRODUCT

• Risk management plan (RMP)

The marketing authorisation holder (MAH) shall perform the required pharmacovigilance activities and interventions detailed in the agreed RMP presented in Module 1.8.2 of the marketing authorisation and any agreed subsequent updates of the RMP.

An updated RMP should be submitted:

- At the request of the European Medicines Agency;
- Whenever the risk management system is modified, especially as the result of new information being received that may lead to a significant change to the benefit/risk profile or as the result of an important (pharmacovigilance or risk minimisation) milestone being reached.

# ANNEX III LABELLING AND PACKAGE LEAFLET

A. LABELLING

#### PARTICULARS TO APPEAR ON THE OUTER PACKAGING

BOX OF 1, 2, 3, 5, 7, 10, 14, 15, 20, 21, 30, 50, 90, 100 TABLETS

#### 1. NAME OF THE MEDICINAL PRODUCT

Aerius 5 mg film-coated tablets desloratadine

# 2. STATEMENT OF ACTIVE SUBSTANCE(S)

Each tablet contains 5 mg desloratadine.

# 3. LIST OF EXCIPIENTS

Contains lactose.

See leaflet for further information.

# 4. PHARMACEUTICAL FORM AND CONTENTS

- 1 film-coated tablet
- 2 film-coated tablets
- 3 film-coated tablets
- 5 film-coated tablets
- 7 film-coated tablets
- 10 film-coated tablets
- 14 film-coated tablets
- 15 film-coated tablets
- 20 film-coated tablets
- 21 film-coated tablets 30 film-coated tablets
- 50 film-coated tablets
- 90 film-coated tablets
- 100 film-coated tablets

# 5. METHOD AND ROUTE(S) OF ADMINISTRATION

Swallow the tablet whole with water.

Oral use

Read the package leaflet before use.

# 6. SPECIAL WARNING THAT THE MEDICINAL PRODUCT MUST BE STORED OUT OF THE SIGHT AND REACH OF CHILDREN

Keep out of the sight and reach of children.

# 7. OTHER SPECIAL WARNING(S), IF NECESSARY 8. **EXPIRY DATE EXP** 9. SPECIAL STORAGE CONDITIONS Do not store above 30°C. Store in the original package. SPECIAL PRECAUTIONS FOR DISPOSAL OF UNUSED MEDICINAL PRODUCTS 10. OR WASTE MATERIALS DERIVED FROM SUCH MEDICINAL PRODUCTS, IF APPROPRIATE 11. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER N.V. Organon Kloosterstraat 6 5349 AB Oss The Netherlands **12.** MARKETING AUTHORISATION NUMBER(S) EU/1/00/160/001 1 tablet EU/1/00/160/002 2 tablets EU/1/00/160/003 3 tablets EU/1/00/160/004 5 tablets EU/1/00/160/005 7 tablets EU/1/00/160/006 10 tablets EU/1/00/160/007 14 tablets EU/1/00/160/008 15 tablets EU/1/00/160/009 20 tablets EU/1/00/160/010 21 tablets EU/1/00/160/011 30 tablets EU/1/00/160/012 50 tablets EU/1/00/160/036 90 tablets EU/1/00/160/013 100 tablets **13. BATCH NUMBER** Lot

23

GENERAL CLASSIFICATION FOR SUPPLY

**INSTRUCTIONS ON USE** 

14.

**15.** 

Aerius	
17. UNIQUE IDENTIFIER – 2D BARCODE	
2D barcode carrying the unique identifier included.	
18. UNIQUE IDENTIFIER - HUMAN READABLE DATA	
PC	
SN	
NN	

16.

INFORMATION IN BRAILLE

MINIMUM PARTICULARS TO APPEAR ON BLISTERS OR STRIPS		
BOX OF 1, 2, 3, 5, 7, 10, 14, 15, 20, 21, 30, 50, 90, 100 TABLETS		
1. NAME OF THE MEDICINAL PRODUCT		
Aerius 5 mg tablet desloratadine		
2. NAME OF THE MARKETING AUTHORISATION HOLDER		
Organon		
3. EXPIRY DATE		
EXP		
4. BATCH NUMBER		
Lot		
r omyton		
5. OTHER		

#### PARTICULARS TO APPEAR ON THE OUTER PACKAGING

BOTTLE OF 30 ml, 50 ml, 60 ml, 100 ml, 120 ml, 150 ml, 225 ml, 300 ml

# 1. NAME OF THE MEDICINAL PRODUCT

Aerius 0.5 mg/ml oral solution desloratadine

# 2. STATEMENT OF ACTIVE SUBSTANCE(S)

Each ml of oral solution contains 0.5 mg desloratadine.

# 3. LIST OF EXCIPIENTS

Contains sorbitol (E420), propylene glycol (E1520) and benzyl alcohol. See leaflet for further information.

# 4. PHARMACEUTICAL FORM AND CONTENTS

oral solution

30 ml with 1 spoon

50 ml with 1 spoon

60 ml with 1 spoon

100 ml with 1 spoon

120 ml with 1 spoon

150 ml with 1 spoon

150 ml with 1 oral syringe

225 ml with 1 spoon

300 ml with 1 spoon

# 5. METHOD AND ROUTE(S) OF ADMINISTRATION

Oral use

Read the package leaflet before use.

# 6. SPECIAL WARNING THAT THE MEDICINAL PRODUCT MUST BE STORED OUT OF THE SIGHT AND REACH OF CHILDREN

Keep out of the sight and reach of children.

# 7. OTHER SPECIAL WARNING(S), IF NECESSARY

# 8. EXPIRY DATE

**EXP** 

# 9. SPECIAL STORAGE CONDITIONS

Do not freeze. Store in the original package.

10. SPECIAL PRECAUTIONS FOR DISPOSAL OF UNUSED MEDICINAL PRODUCTS OR WASTE MATERIALS DERIVED FROM SUCH MEDICINAL PRODUCTS, IF APPROPRIATE

# 11. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER

N.V. Organon Kloosterstraat 6 5349 AB Oss The Netherlands

# 12. MARKETING AUTHORISATION NUMBER(S)

EU/1/00/160/061	30 ml with 1 spoon
EU/1/00/160/062	50 ml with 1 spoon
EU/1/00/160/063	60 ml with 1 spoon
EU/1/00/160/064	100 ml with 1 spoon
EU/1/00/160/065	120 ml with 1 spoon
EU/1/00/160/066	150 ml with 1 spoon
EU/1/00/160/069	150 ml with 1 oral syringe
EU/1/00/160/067	225 ml with 1 spoon
EU/1/00/160/068	300 ml with 1 spoon

# 13. BATCH NUMBER

Lot

# 14. GENERAL CLASSIFICATION FOR SUPPLY

# 15. INSTRUCTIONS ON USE

# 16. INFORMATION IN BRAILLE

Aerius

# 17. UNIQUE IDENTIFIER – 2D BARCODE

2D barcode carrying the unique identifier included.

# 18. UNIQUE IDENTIFIER - HUMAN READABLE DATA

PC

SN

NN

BOTTLE OF 30 ml, 50 ml, 60 ml, 100 ml, 120 ml, 150 ml, 225 ml, 300 ml			
1. NAME OF THE MEDICINAL PRODUCT AND ROUTE(S) OF ADMINISTRATION			
Aerius 0.5 mg/ml oral solution desloratadine			
2. METHOD OF ADMINISTRATION			
Oral use			
3. EXPIRY DATE			
EXP			
4. BATCH NUMBER			
Lot			
5. CONTENTS BY WEIGHT, BY VOLUME OR BY UNIT			
30 ml 50 ml 60 ml 100 ml 120 ml 150 ml 225 ml 300 ml			
6. OTHER			

MINIMUM PARTICULARS TO APPEAR ON SMALL IMMEDIATE PACKAGING UNITS

Do not freeze. Store in the original package.

B. PACKAGE LEAFLET

#### Package leaflet: Information for the patient

#### Aerius 5 mg film-coated tablets

desloratadine

# Read all of this leaflet carefully before you start taking this medicine because it contains important information for you.

- Keep this leaflet. You may need to read it again.
- If you have any further questions, ask your doctor, pharmacist or nurse.
- This medicine has been prescribed for you only. Do not pass it on to others. It may harm them, even if their signs of illness are the same as yours.
- If you get any side effects, talk to your doctor, pharmacist or nurse. This includes any possible side effects not listed in this leaflet. See section 4.

#### What is in this leaflet

- 1. What Aerius is and what it is used for
- 2. What you need to know before you take Aerius
- 3. How to take Aerius
- 4. Possible side effects
- 5. How to store Aerius
- 6. Contents of the pack and other information

#### 1. What Aerius is and what it is used for

#### What Aerius is

Aerius contains desloratadine which is an antihistamine.

#### **How Aerius works**

Aerius is an antiallergy medicine that does not make you drowsy. It helps control your allergic reaction and its symptoms.

# When Aerius should be used

Aerius relieves symptoms associated with allergic rhinitis (inflammation of the nasal passages caused by an allergy, for example, hay fever or allergy to dust mites) in adults and adolescents 12 years of age and older. These symptoms include sneezing, runny or itchy nose, itchy palate, and itchy, red or watery eyes.

Aerius is also used to relieve the symptoms associated with urticaria (a skin condition caused by an allergy). These symptoms include itching and hives.

Relief of these symptoms lasts a full day and helps you to resume your normal daily activities and sleep.

# 2. What you need to know before you take Aerius

# Do not take Aerius

- if you are allergic to desloratedine, or any of the other ingredients of this medicine (listed in section 6) or to loratedine.

#### Warnings and precautions

Talk to your doctor, pharmacist or nurse before taking Aerius:

- if you have poor kidney function.
- if you have medical or familial history of seizures.

#### Children and adolescents

Do not give this medicine to children less than 12 years of age.

#### Other medicines and Aerius

There are no known interactions of Aerius with other medicines.

Tell your doctor or pharmacist if you are taking, have recently taken or might take any other medicines.

#### Aerius with food, drink and alcohol

Aerius may be taken with or without a meal.

Use caution when taking Aerius with alcohol.

# Pregnancy, breast-feeding and fertility

If you are pregnant or breast-feeding, think you may be pregnant or are planning to have a baby, ask your doctor or pharmacist for advice before taking this medicine.

Taking Aerius is not recommended if you are pregnant or nursing a baby.

There is no data available on male/female fertility.

# **Driving and using machines**

At the recommended dose, this medicine is not expected to affect your ability to drive or use machines. Although most people do not experience drowsiness, it is recommended not to engage in activities requiring mental alertness, such as driving a car or operating machinery until you have established your own response to the medicine.

#### **Aerius tablet contains lactose**

If you have been told by your doctor that you have an intolerance to some sugars, contact your doctor before taking this medicine.

# 3. How to take Aerius

Always take this medicine exactly as your doctor or pharmacist has told you. Check with your doctor or pharmacist if you are not sure.

# Use in adults and adolescents 12 years of age and over

The recommended dose is one tablet once a day with water, with or without food.

This medicine is for oral use.

Swallow the tablet whole.

Regarding the duration of treatment, your physician will determine the type of allergic rhinitis you are suffering from and will determine for how long you should take Aerius.

If your allergic rhinitis is intermittent (presence of symptoms for less than 4 days per week or for less than 4 weeks), your physician will recommend you a treatment schedule that will depend on the evaluation of the history of your disease.

If your allergic rhinitis is persistent (presence of symptoms for 4 days or more per week and for more than 4 weeks), your physician may recommend you a longer term treatment.

For urticaria, the duration of treatment may be variable from patient to patient and therefore you should follow the instructions of your physician.

#### If you take more Aerius than you should

Take Aerius only as it is prescribed for you. No serious problems are expected with accidental overdose. However, if you take more Aerius than you were told to, tell your doctor, pharmacist or nurse immediately.

### If you forget to take Aerius

If you forget to take your dose on time, take it as soon as possible and then go back to your regular dosing schedule. Do not take a double dose to make up for a forgotten dose.

# If you stop taking Aerius

If you have any further questions on the use of this medicine, ask your doctor, pharmacist or nurse.

#### 4. Possible side effects

Like all medicines, this medicine can cause side effects, although not everybody gets them.

During the marketing of Aerius, cases of severe allergic reactions (difficulty in breathing, wheezing, itching, hives and swelling) have been reported very rarely. If you notice any of these serious side effects, stop taking the medicine and seek urgent medical advice straight away.

In clinical studies in adults, side effects were about the same as with a dummy tablet. However, fatigue, dry mouth and headache were reported more often than with a dummy tablet. In adolescents, headache was the most commonly reported side effect.

In clinical studies with Aerius, the following side effects were reported as:

Common: the following may affect up to 1 in 10 people

- fatigue
- dry mouth
- headache

During the marketing of Aerius, the following side effects were reported as:

Very rare: the following may affect up to 1 in 10,000 people

- severe allergic reactions
- rash
- pounding or irregular heartbeat
- fast heartbeat
- stomach ache
- feeling sick (nausea)
- vomiting
- upset stomach
- diarrhoea
- dizziness
- drowsiness
- inability to sleep
- muscle pain
- hallucinations
- seizures
- restlessness with increased body movement
- liver inflammation
- abnormal liver function tests

Not known: frequency cannot be estimated from the available data

- unusual weakness
- yellowing of the skin and/or eyes
- increased sensitivity of the skin to the sun, even in case of hazy sun, and to UV light, for instance to UV lights of a solarium
- changes in the way the heart beats

- abnormal behaviour
- aggression
- weight increased, increased appetite
- depressed mood
- dry eyes

#### Children

Not known: frequency cannot be estimated from the available data

- slow heartbeat
- change in the way the heart beats
- abnormal behaviour
- aggression

# Reporting of side effects

If you get any side effects, talk to your doctor, pharmacist or nurse. This includes any possible side effects not listed in this leaflet. You can also report side effects directly via the national reporting system listed in <u>Appendix V</u>. By reporting side effects you can help provide more information on the safety of this medicine.

#### 5. How to store Aerius

Keep this medicine out of the sight and reach of children.

Do not use this medicine after the expiry date which is stated on the carton and blister after EXP. The expiry date refers to the last day of that month.

Do not store above 30°C. Store in the original package.

Do not use this medicine if you notice any change in the appearance of the tablets.

Do not throw away any medicines via wastewater or household waste. Ask your pharmacist how to throw away medicines you no longer use. These measures will help protect the environment.

#### 6. Contents of the pack and other information

### What Aerius contains

- The active substance is desloratedine 5 mg
- The other ingredients of the tablet are calcium hydrogen phosphate dihydrate, microcrystalline cellulose, maize starch, talc. Tablet coating contains film coat (containing lactose monohydrate (see section 2 "Aerius tablet contains lactose"), hypromellose, titanium dioxide, macrogol 400, indigotin (E132)), clear coat (containing hypromellose, macrogol 400), carnauba wax, white wax.

# What Aerius looks like and contents of the pack

Aerius 5 mg film-coated tablet is light blue, round and embossed with elongated letters "S" and "P" on one side and plain on the other.

Aerius 5 mg film-coated tablets are packed in blisters in packs of 1, 2, 3, 5, 7, 10, 14, 15, 20, 21, 30, 50, 90 or 100 tablets.

Not all pack sizes may be marketed.

#### **Marketing Authorisation Holder and Manufacturer**

Marketing Authorisation Holder: N.V. Organon Kloosterstraat 6

5349 AB Oss The Netherlands

Manufacturer: Organon Heist bv, Industriepark 30, 2220 Heist-op-den-Berg, Belgium.

For any information about this medicine, please contact the local representative of the Marketing Authorisation Holder:

#### België/Belgique/Belgien

Organon Belgium

Tél/Tel: 0080066550123 (+32 2 2418100)

dpoc.benelux@organon.com

#### България

Органон (И.А.) Б.В. - клон България

Тел.: +359 2 806 3030 dpoc.bulgaria@organon.com

# Česká republika

Organon Czech Republic s.r.o. Tel.: +420 233 010 300

dpoc.czech@organon.com

#### **Danmark**

Organon Denmark ApS Tlf: +45 4484 6800

info.denmark@organon.com

#### **Deutschland**

Organon Healthcare GmbH

Tel: 0800 3384 726 (+49 (0) 89 2040022 10)

dpoc.germany@organon.com

#### **Eesti**

Organon Pharma B.V. Estonian RO

Tel: +372 66 61 300

dpoc.estonia@organon.com

### Ελλάδα

BIANEE A.E.

Τηλ: +30 210 80091 11

Mailbox@vianex.gr

#### España

Organon Salud, S.L.

Tel: +34 91 591 12 79

organon\_info@organon.com

#### **France**

**Organon France** 

Tél: +33 (0) 1 57 77 32 00

#### Lietuva

Organon Pharma B.V. Lithuania atstovybė

Tel.: +370 52041693

dpoc.lithuania@organon.com

#### Luxembourg/Luxemburg

Organon Belgium

Tél/Tel: 0080066550123 (+32 2 2418100)

dpoc.benelux@organon.com

# Magyarország

Organon Hungary Kft.

Tel.: +36 1 766 1963

dpoc.hungary@organon.com

#### Malta

Organon Pharma B.V., Cyprus branch

Tel: +356 2277 8116

dpoc.cyprus@organon.com

#### **Nederland**

N.V. Organon

Tel.: 00800 66550123 (+32 2 2418100)

dpoc.benelux@organon.com

#### Norge

Organon Norway AS

Tlf: +47 24 14 56 60

info.norway@organon.com

#### Österreich

Organon Austria GmbH

Tel: +43 (0) 1 263 28 65

dpoc.austria@organon.com

#### Polska

Organon Polska Sp. z o.o.

Tel.: +48 22 105 50 01

organonpolska@organon.com

#### **Portugal**

Organon Portugal, Sociedade Unipessoal Lda.

Tel: +351 218705500

geral\_pt@organon.com

#### Hrvatska

Organon Pharma d.o.o. Tel: +385 1 638 4530 dpoc.croatia@organon.com

#### **Ireland**

Organon Pharma (Ireland) Limited Tel: +353 15828260 medinfo.ROI@organon.com

#### Ísland

Vistor hf.

Sími: +354 535 7000

#### Italia

Organon Italia S.r.l. Tel: +39 06 90259059 dpoc.italy@organon.com

# Κύπρος

Organon Pharma B.V., Cyprus branch Tηλ: +357 22866730 dpoc.cyprus@organon.com

#### Latvija

Ārvalsts komersanta "Organon Pharma B.V." pārstāvniecība Tel: +371 66968876 dpoc.latvia@organon.com

#### România

Organon Biosciences S.R.L. Tel: +40 21 527 29 90 dpoc.romania@organon.com

#### Slovenija

Organon Pharma B.V., Oss, podružnica Ljubljana Tel: +386 1 300 10 80 dpoc.slovenia@organon.com

# Slovenská republika

Organon Slovakia s. r. o. Tel: +421 2 44 88 98 88 dpoc.slovakia@organon.com

# Suomi/Finland

Organon Finland Oy Puh/Tel: +358 (0) 29 170 3520 dpoc.finland@organon.com

#### **Sverige**

Organon Sweden AB Tel: +46 8 502 597 00 dpoc.sweden@organon.com

#### **United Kingdom (Northern Ireland)**

Organon Pharma (UK) Limited Tel: +44 (0) 208 159 3593 medicalinformationuk@organon.com

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Detailed information on this medicine is available on the European Medicines Agency website <a href="http://www.ema.europa.eu">http://www.ema.europa.eu</a>.

#### Package leaflet: Information for the patient

#### Aerius 0.5 mg/ml oral solution

desloratadine

# Read all of this leaflet carefully before you start taking this medicine because it contains important information for you.

- Keep this leaflet. You may need to read it again.
- If you have any further questions, ask your doctor, pharmacist or nurse.
- This medicine has been prescribed for you only. Do not pass it on to others. It may harm them, even if their signs of illness are the same as yours.
- If you get any side effects, talk to your doctor, pharmacist or nurse. This includes any possible side effects not listed in this leaflet. See section 4.

#### What is in this leaflet

- 1. What Aerius oral solution is and what it is used for
- 2. What you need to know before you take Aerius oral solution
- 3. How to take Aerius oral solution
- Possible side effects
- 5. How to store Aerius oral solution
- 6. Contents of the pack and other information

#### 1. What Aerius oral solution is and what it is used for

#### What Aerius is

Aerius contains desloratadine which is an antihistamine.

#### **How Aerius works**

Aerius oral solution is an antiallergy medicine that does not make you drowsy. It helps control your allergic reaction and its symptoms.

#### When Aerius should be used

Aerius oral solution relieves symptoms associated with allergic rhinitis (inflammation of the nasal passages caused by an allergy, for example, hay fever or allergy to dust mites) in adults, adolescents and children 1 year of age and older. These symptoms include sneezing, runny or itchy nose, itchy palate, and itchy, red or watery eyes.

Aerius oral solution is also used to relieve the symptoms associated with urticaria (a skin condition caused by an allergy). These symptoms include itching and hives.

Relief of these symptoms lasts a full day and helps you to resume your normal daily activities and sleep.

# 2. What you need to know before you take Aerius oral solution

#### Do not take Aerius oral solution

- if you are allergic to desloratedine, or to any of the other ingredients of this medicine (listed in section 6) or to loratedine.

# Warnings and precautions

Talk to your doctor, pharmacist or nurse before taking Aerius:

- if you have poor kidney function.
- if you have medical or familial history of seizures.

#### Children and adolescents

Do not give this medicine to children less than 1 year of age.

#### Other medicines and Aerius

There are no known interactions of Aerius with other medicines.

Tell your doctor or pharmacist if you are taking, have recently taken or might take any other medicines.

#### Aerius oral solution with food, drink and alcohol

Aerius may be taken with or without a meal.

Use caution when taking Aerius with alcohol.

#### Pregnancy, breast-feeding and fertility

If you are pregnant or breast-feeding, think you may be pregnant or are planning to have a baby, ask your doctor or pharmacist for advice before taking this medicine.

Taking Aerius oral solution is not recommended if you are pregnant or nursing a baby.

There is no data available on male/female fertility.

#### **Driving and using machines**

At the recommended dose, this medicine is not expected to affect your ability to drive or use machines. Although most people do not experience drowsiness, it is recommended not to engage in activities requiring mental alertness, such as driving a car or operating machinery until you have established your own response to the medicine.

#### Aerius oral solution contains sorbitol (E420)

This medicine contains 150 mg sorbitol (E420) in each ml of oral solution.

Sorbitol is a source of fructose. If your doctor has told you that you (or your child) have an intolerance to some sugars or if you have been diagnosed with hereditary fructose intolerance (HFI), a rare genetic disorder in which a person cannot break down fructose, talk to your doctor before you (or your child) take or receive this medicine.

#### Aerius oral solution contains propylene glycol (E1520)

This medicine contains 100.75 mg propylene glycol (E1520) in each ml of oral solution.

# Aerius oral solution contains sodium

This medicine contains less than 1 mmol sodium (23 mg) per dose, that is to say essentially 'sodium-free'.

#### Aerius oral solution contains benzyl alcohol

This medicine contains 0.75 mg benzyl alcohol in each ml of oral solution.

Benzyl alcohol may cause allergic reactions.

Do not use for more than a week in young children (less than 3 years old), unless advised by your doctor or pharmacist.

Ask your doctor or pharmacist for advice if you have a liver or kidney disease. This is because large amounts of benzyl alcohol can build-up in your body and may cause side effects (called "metabolic acidosis").

Ask your doctor or pharmacist for advice if you are pregnant or breast-feeding. This is because large amounts of benzyl alcohol can build-up in your body and may cause side effects (called "metabolic acidosis").

#### 3. How to take Aerius oral solution

Always take this medicine exactly as your doctor or pharmacist has told you. Check with your doctor or pharmacist if you are not sure.

#### Use in children

Children 1 through 5 years of age:

The recommended dose is 2.5 ml ( $\frac{1}{2}$  of a 5 ml spoonful) of oral solution once a day.

Children 6 through 11 years of age:

The recommended dose is 5 ml (one 5 ml spoonful) of oral solution once a day.

# Use in adults and adolescents 12 years of age and over

The recommended dose is 10 ml (two 5 ml spoonfuls) of oral solution once a day.

In case an oral measuring syringe is provided with the bottle of oral solution, you can alternatively use it to take the appropriate amount of oral solution.

This medicine is for oral use.

Swallow the dose of oral solution and then drink some water. You can take this medicine with or without food.

Regarding the duration of treatment, your physician will determine the type of allergic rhinitis you are suffering from and will determine for how long you should take Aerius oral solution.

If your allergic rhinitis is intermittent (presence of symptoms for less than 4 days per week or for less than 4 weeks), your physician will recommend you a treatment schedule that will depend on the evaluation of the history of your disease.

If your allergic rhinitis is persistent (presence of symptoms for 4 days or more per week and for more than 4 weeks), your physician may recommend you a longer term treatment.

For urticaria, the duration of treatment may be variable from patient to patient and therefore you should follow the instructions of your physician.

# If you take more Aerius oral solution than you should

Take Aerius oral solution only as it is prescribed for you. No serious problems are expected with accidental overdose. However, if you take more Aerius oral solution than you were told to, tell your doctor, pharmacist or nurse immediately.

# If you forget to take Aerius oral solution

If you forget to take your dose on time, take it as soon as possible and then go back to your regular dosing schedule. Do not take a double dose to make up for a forgotten dose.

# If you stop taking Aerius oral solution

If you have any further questions on the use of this medicine, ask your doctor, pharmacist or nurse.

#### 4. Possible side effects

Like all medicines, this medicine can cause side effects, although not everybody gets them.

During the marketing of Aerius, cases of severe allergic reactions (difficulty in breathing, wheezing, itching, hives and swelling) have been reported very rarely. If you notice any of these serious side effects, stop taking the medicine and seek urgent medical advice straight away.

In clinical studies in most children and adults, side effects with Aerius were about the same as with a dummy solution or tablet. However, common side effects in children less than 2 years of age were

diarrhoea, fever and insomnia while in adults, fatigue, dry mouth and headache were reported more often than with a dummy tablet.

In clinical studies with Aerius, the following side effects were reported as:

Common: the following may affect up to 1 in 10 people

- fatigue
- dry mouth
- headache

#### Children

Common in children less than 2 years of age: the following may affect up to 1 in 10 children

- diarrhoea
- fever
- insomnia

During the marketing of Aerius, the following side effects were reported as:

Very rare: the following may affect up to 1 in 10,000 people

- severe allergic reactions
- rash
- pounding or irregular heartbeat
- fast heartbeat
- stomach ache
- feeling sick (nausea)
- vomiting
- upset stomach
- diarrhoea
- dizziness
- drowsiness
- inability to sleep
- muscle pain
- hallucinations
- seizures
- restlessness with increased body movement
- liver inflammation
- abnormal liver function tests

Not known: frequency cannot be estimated from the available data

- unusual weakness
- yellowing of the skin and/or eyes
- increased sensitivity of the skin to the sun, even in case of hazy sun, and to UV light, for instance to UV lights of a solarium
- changes in the way the heart beats
- abnormal behaviour
- aggression
- weight increased, increased appetite
- depressed mood
- dry eyes

#### Children

Not known: frequency cannot be estimated from the available data

- slow heartbeat
- change in the way the heart beats
- abnormal behaviour

# aggression

#### Reporting of side effects

If you get any side effects, talk to your doctor, pharmacist or nurse. This includes any possible side effects not listed in this leaflet. You can also report side effects directly via the national reporting system listed in <u>Appendix V</u>. By reporting side effects you can help provide more information on the safety of this medicine.

#### 5. How to store Aerius oral solution

Keep this medicine out of the sight and reach of children.

Do not use this medicine after the expiry date which is stated on the bottle after EXP. The expiry date refers to the last day of that month.

Do not freeze. Store in the original package.

Do not use this medicine if you notice any change in the appearance of the oral solution.

Do not throw away any medicines via wastewater or household waste. Ask your pharmacist how to throw away medicines you no longer use. These measures will help protect the environment.

#### 6. Contents of the pack and other information

#### What Aerius oral solution contains

- The active substance is deslorated in 0.5 mg/ml
- The other ingredients of the oral solution are sorbitol (E420), propylene glycol (E1520) (see section 2 "Aerius oral solution contains sorbitol (E420) and propylene glycol (E1520)"), sucralose (E955), hypromellose 2910, sodium citrate dihydrate, natural and artificial flavour (bubblegum, which contains propylene glycol (E1520) and benzyl alcohol (see section 2 "Aerius oral solution contains benzyl alcohol")), citric acid anhydrous, disodium edetate and purified water.

#### What Aerius oral solution looks like and contents of the pack

Aerius oral solution is a clear, colourless solution.

Aerius oral solution is available in bottles of 30, 50, 60, 100, 120, 150, 225 and 300 ml, with a childproof cap. For all packages except the 150 ml bottle, a measuring spoon is provided, marked for doses of 2.5 ml and 5 ml. For the 150 ml package, a measuring spoon or an oral measuring syringe is provided, marked for doses of 2.5 ml and 5 ml.

Not all pack sizes may be marketed.

# **Marketing Authorisation Holder and Manufacturer**

Marketing Authorisation Holder:

N.V. Organon Kloosterstraat 6 5349 AB Oss The Netherlands

Manufacturer: Organon Heist by, Industriepark 30, 2220 Heist-op-den-Berg, Belgium.

For any information about this medicine, please contact the local representative of the Marketing Authorisation Holder:

### België/Belgique/Belgien

Organon Belgium

Tél/Tel: 0080066550123 (+32 2 2418100)

dpoc.benelux@organon.com

# България

Органон (И.А.) Б.В. - клон България

Тел.: +359 2 806 3030 dpoc.bulgaria@organon.com

### Česká republika

Organon Czech Republic s.r.o. Tel.: +420 233 010 300 dpoc.czech@organon.com

#### **Danmark**

Organon Denmark ApS Tlf: +45 4484 6800 info.denmark@organon.com

#### **Deutschland**

Organon Healthcare GmbH Tel: 0800 3384 726 (+49 (0) 89 2040022 10) dpoc.germany@organon.com

#### **Eesti**

Organon Pharma B.V. Estonian RO Tel: +372 66 61 300 dpoc.estonia@organon.com

#### Ελλάδα

BIANEΞ A.E. Tηλ: +30 210 80091 11 Mailbox@vianex.gr

#### España

Organon Salud, S.L. Tel: +34 91 591 12 79 organon info@organon.com

#### France

Organon France Tél: +33 (0) 1 57 77 32 00

# Hrvatska

Organon Pharma d.o.o. Tel: +385 1 638 4530 dpoc.croatia@organon.com

#### **Ireland**

Organon Pharma (Ireland) Limited Tel: +353 15828260 medinfo.ROI@organon.com

#### Lietuva

Organon Pharma B.V. Lithuania atstovybė Tel.: +370 52041693 dpoc.lithuania@organon.com

### Luxembourg/Luxemburg

Organon Belgium Tél/Tel: 0080066550123 (+32 2 2418100) dpoc.benelux@organon.com

#### Magyarország

Organon Hungary Kft. Tel.: +36 1 766 1963 dpoc.hungary@organon.com

#### Malta

Organon Pharma B.V., Cyprus branch Tel: +356 2277 8116 dpoc.cyprus@organon.com

#### **Nederland**

N.V. Organon Tel.: 00800 66550123 (+32 2 2418100) dpoc.benelux@organon.com

#### Norge

Organon Norway AS Tlf: +47 24 14 56 60 info.norway@organon.com

#### Österreich

Organon Austria GmbH Tel: +43 (0) 1 263 28 65 dpoc.austria@organon.com

#### Polska

Organon Polska Sp. z o.o. Tel.: +48 22 105 50 01 organonpolska@organon.com

#### **Portugal**

Organon Portugal, Sociedade Unipessoal Lda. Tel: +351 218705500 geral\_pt@organon.com

# România

Organon Biosciences S.R.L. Tel: +40 21 527 29 90 dpoc.romania@organon.com

#### Slovenija

Organon Pharma B.V., Oss, podružnica Ljubljana Tel: +386 1 300 10 80 dpoc.slovenia@organon.com

# Ísland

Vistor hf.

Sími: + 354 535 7000

#### Italia

Organon Italia S.r.l. Tel: +39 06 90259059 dpoc.italy@organon.com

### Κύπρος

Organon Pharma B.V., Cyprus branch Tηλ: +357 22866730 dpoc.cyprus@organon.com

#### Latvija

Ārvalsts komersanta "Organon Pharma B.V." pārstāvniecība Tel: +371 66968876

dpoc.latvia@organon.com

# Slovenská republika

Organon Slovakia s. r. o. Tel: +421 2 44 88 98 88 dpoc.slovakia@organon.com

# Suomi/Finland

Organon Finland Oy Puh/Tel: +358 (0) 29 170 3520 dpoc.finland@organon.com

# **Sverige**

Organon Sweden AB Tel: +46 8 502 597 00 dpoc.sweden@organon.com

#### **United Kingdom (Northern Ireland)**

Organon Pharma (UK) Limited Tel: +44 (0) 208 159 3593 medicalinformationuk@organon.com

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