

## NEW ZEALAND DATA SHEET

### 1 PRODUCT NAME

FORADIL® Formoterol fumarate 12 microgram inhalation powder, hard capsules

### 2 QUALITATIVE AND QUANTITATIVE COMPOSITION

One capsule contains 12 micrograms formoterol fumarate dihydrate (INN: formoterol).

For the full list of excipients, see section 6.1.

### 3 PHARMACEUTICAL FORM

Inhalation powder in hard capsules.

### 4 CLINICAL PARTICULARS

#### 4.1 Therapeutic indications

##### Asthma

FORADIL is indicated for the treatment of bronchoconstriction in adults and children six years of age and over with asthma as an add-on to inhaled corticosteroid (ICS) treatment.

In the management of asthma, FORADIL should be used only as an adjunct to corticosteroids.

FORADIL should not be used in the treatment of acute asthmatic symptoms, or in patients whose asthma can be managed by occasional use of short-acting beta-2 agonists.

##### Bronchospasm

FORADIL is indicated in adults and children six years of age and over for the prophylaxis of bronchospasm induced by inhaled allergens, cold air, or exercise.

##### Chronic Obstructive Pulmonary Disease (COPD)

FORADIL is indicated for the prophylaxis and treatment of bronchoconstriction in adults with reversible or irreversible chronic obstructive pulmonary disease (COPD) including chronic bronchitis and emphysema.

#### 4.2 Dosage And Method Of Administration

FORADIL is for inhalation use in adults and in children 6 years of age and older.

FORADIL inhalation powder capsules should be used only with the Aerolizer® device provided in the FORADIL pack.

To ensure proper administration of the drug, a physician or other health professional should:

- Show the patient how to use the inhaler.

- Dispense the capsule only together with the inhaler.
- Instruct the patient that the capsules are only for inhalation use and not to be swallowed (see Warnings and precautions section).

Detailed handling instructions are included in the package leaflet.

The dose of FORADIL should be individualized to the patient's needs and should be at the lowest possible dose to fulfill the therapeutic objective. It should not be increased beyond the maximum recommended dose.

### **Asthma regular maintenance therapy**

FORADIL must not be administered as monotherapy in the treatment of asthma. In these patients, it **must only be administered in combination inhaled corticosteroids**.

If the need for additional doses is more than occasional (e.g. more frequent than 2 days per week) medical advice should be sought and therapy reassessed, as this may indicate a worsening of the underlying condition.

FORADIL should not be used to relieve the acute symptoms of an asthma attack. In the event of an acute attack, a short-acting beta2-agonist should be used (see **Warnings and Precautions** section).

#### Adults:

1 to 2 inhalation capsules (equivalent to 12 to 24 micrograms formoterol) twice daily as an add-on to an inhaled corticosteroid. The maximum recommended maintenance dose is 48 micrograms per day.

If required, an additional 1 to 2 capsules per day may be used for the relief of ordinary symptoms provided the recommended daily maximum dose of 48 micrograms per day is not exceeded.

#### Children aged 6 years and older:

For children 6-12 years of age, treatment with a combination product containing an inhaled corticosteroid and long-acting beta2-agonist (LABA) is recommended to ensure compliance with both medications, except in cases where a separate inhaled corticosteroid and long-acting beta2-agonist are required (see **Warnings and Precautions** and **Adverse effects** sections)

If the use of FORADIL is warranted, the recommended dose is inhalation capsule (12 micrograms) twice daily as an add-on to an inhaled corticosteroid. The maximum recommended dose is 24 microgram per day.

#### Children under 6 year of age

FORADIL is not recommended in children under 6 years of age.

### **Prophylaxis against exercise-induced bronchospasm or before exposure to a known unavoidable allergen**

The content of 1 inhalation capsule (12 micrograms) should be inhaled at least 15 minutes prior to exercise or exposure.

In adults and children over 6 years with a history of severe bronchospasm, 2 inhalation capsules (24 microgram) may be necessary as prophylaxis.

In patients with persistent asthma, use of FORADIL for the prevention of exercise-induced bronchospasm or before exposure to a known unavoidable allergen may be clinically indicated, but the treatment of asthma should also include an ICS.

### **Chronic obstructive pulmonary disease**

#### Adults:

For regular maintenance therapy:

1 to 2 inhalation capsules (12 to 24 micrograms) twice daily.

### **4.3 Contraindications**

Known hypersensitivity to formoterol or to any of the excipients (see Pharmaceutical particulars - List of excipients).

### **4.4 Special Warnings And Precautions For Use**

The dose of FORADIL should be individualized to the patient's needs and should be at the lowest possible dose to fulfill the therapeutic objective. It should not be increased beyond the maximum recommended dose (see Dosage and method of administration).

#### **Anti-inflammatory therapy**

When treating patients with asthma, FORADIL should only be used as an add-on to an inhaled corticosteroid (ICS) for patients who are not adequately controlled on an ICS alone or whose disease severity clearly warrants initiation of treatment with both an ICS and a LABA. For children 5-12 years of age, treatment with a combination product containing an ICS and LABA is recommended, except in case where a separate ICS and LABA are required (see Dosage and Mode of Administration and Adverse Effects sections).

FORADIL should not be used in conjunction with another LABA.

Whenever FORADIL is prescribed, patients should be evaluated for the adequacy of the anti-inflammatory therapy they receive. Patients must be advised to continue anti-inflammatory therapy unchanged after the introduction of FORADIL, even if the symptoms improve.

Once asthma symptoms are controlled, consideration may be given to gradually reducing the dose of FORADIL. Regular monitoring of patients as treatment is stepped down is important. The lowest effective dose of FORADIL should be used.

#### **Acute asthma symptoms**

FORADIL must not be used to relieve acute asthma symptoms. In the event of an acute attack, a short-acting beta<sub>2</sub>-agonist should be used.

#### **Deterioration of asthma control**

Sudden and progressive deterioration of asthma control is potentially life-threatening.

The physician should reassess asthma therapy if symptoms persist, or with increasing use of bronchodilators or FORADIL are required to relieve or control symptoms as this usually indicates that the underlying condition has deteriorated.

Patients must be informed of the need to seek medical treatment immediately if their asthma deteriorates suddenly or if they find that short-acting relief bronchodilator treatment becomes less effective.

### **Asthma exacerbations**

FORADIL must not be initiated or the dose increased during an asthma exacerbation.

Severe asthma exacerbations should be treated in the normal way with nebulised or parenteral bronchodilators and parenteral corticosteroids, together with other supportive measures.

Clinical studies with FORADIL suggested a higher incidence of serious asthma exacerbations in patients who received FORADIL than in those who received placebo, particularly in patients 5-12 years of age (see Adverse effects). These studies do not allow precise quantification of the differences in serious asthma exacerbation rates between treatment groups.

A large US study (SMART) compared the safety of salmeterol (a different LABA), with placebo. In this study, a higher rate of asthma-related deaths was observed in the patients treated with salmeterol who were not receiving inhaled corticosteroids as part of their usual therapy at the start of the study, compared to those receiving placebo (9/7049 vs 0/7041). There were no significant differences between the salmeterol and placebo treatment groups among patients who were receiving inhaled corticosteroids at the start of the study.

### **Concomitant conditions**

Special care and supervision, with particular emphasis on dosage limits, is required when FORADIL is given in patients with the following conditions:

- Ischaemic heart disease
- cardiac arrhythmias (especially third-degree atrioventricular block),
- severe cardiac decompensation
- idiopathic subvalvular aortic stenosis
- aneurysm
- phaeochromocytoma
- severe hypertension
- hypertrophic obstructive cardiomyopathy
- thyrotoxicosis
- known or suspected prolongation of the QT interval (QTc >0.44 sec.; see Interactions).

Due to the hyperglycaemic effect of beta2-stimulants, including FORADIL, additional blood glucose monitoring is recommended in diabetic patients.

### **Hypokalaemia**

Potentially serious hypokalaemia may occur as a result of beta2-agonist therapy, including FORADIL. Hypokalaemia may increase susceptibility to cardiac arrhythmias. Particular caution is advised in patients predisposed to low levels of serum potassium as well as those with severe asthma as hypokalaemia may be potentiated by hypoxia and concomitant treatment (see Interactions section). It is recommended that serum potassium levels be monitored in such situations.

### **Paradoxical bronchospasm**

As with other inhalation therapy, the potential for paradoxical bronchospasm should be kept in mind. If it occurs, the preparation should be discontinued immediately and alternative therapy substituted.

### **Incorrect route of administration**

There have been reports of patients who have mistakenly swallowed Foradil capsules instead of placing the capsules in the Aerolizer inhalation device. The majority of these ingestions were not associated with side effects. Healthcare providers should discuss with the patient how to correctly use Foradil Aerolizer (see section 4 Dosage and administration subsection method of administration). If a patient who is prescribed Foradil Aerolizer does not experience breathing improvement, the healthcare provider should ask how the patient is using Foradil Aerolizer.

## **4.5 Interaction With Other Medicinal Products And Other Forms Of Interaction**

FORADIL, as other beta2-agonists, should be administered with caution to patients being treated with drugs known to prolong the QTc interval (such as quinidine, disopyramide, procainamide, phenothiazines, antihistamines, macrolides, monoamine oxidase inhibitors and tricyclic antidepressants), because the action of adrenergic agonists on the cardiovascular system may be potentiated by these agents. Drugs that are known to prolong the QTc-interval have an increased risk of ventricular arrhythmia (see Warnings and Precautions section).

Concomitant administration of other sympathomimetic agents may potentiate the adverse effects of FORADIL.

Concomitant treatment with xanthine derivatives, steroids, or diuretics may potentiate the possible hypokalaemic effect of beta2-agonists (see Warnings and Precautions section).

There is an elevated risk of arrhythmias in patients receiving concomitant anesthesia with halogenated hydrocarbons.

Beta-adrenergic blockers may weaken or antagonise the effect of FORADIL. Therefore FORADIL should not be given together with beta-adrenergic blockers (including eye drops) unless there are compelling reasons for their use.

## 4.6 FERTILITY, PREGNANCY AND LACTATION

### Pregnancy

The safety of FORADIL during pregnancy has not yet been established. Its use during pregnancy should be avoided unless there is no safer alternative and should only be considered if the expected benefit to the mother is greater than any possible risk to the foetus. Like other beta<sub>2</sub>-adrenergic stimulants, formoterol may inhibit labour due to a relaxant effect on uterine smooth muscle.

### Breast-feeding

It is not known whether formoterol passes into human breast milk. The substance has been detected in the milk of lactating rats. Therefore, mothers taking FORADIL should not breast-feed.

## 4.7 Effects on ability to drive and use machines

Patients experiencing dizziness or other similar side effects should be advised to refrain from driving or using machines.

## 4.8 Undesirable effects

### Data from clinical trials

Placebo-controlled clinical studies suggested a higher incidence of serious asthma exacerbations in patients who received FORADIL than in those who received placebo, particularly in patients 5-12 years of age.

Adverse reactions (Table 1) identified in clinical trials are ranked in descending order of frequency, as follows:

very common ( $\geq 1/10$ )

common ( $\geq 1/100, < 1/10$ )

uncommon ( $\geq 1/1,000, < 1/100$ )

rare ( $\geq 1/10,000, < 1/1,000$ )

very rare ( $< 1/10,000$ ), including isolated reports.

Within each frequency grouping, adverse reactions are ranked in order of decreasing seriousness.

**Table 1 Adverse reactions associated with formoterol identified in clinical trials**

<b>Immune system disorders</b>	
Very rare:	Hypersensitivity (including hypotension, urticaria, angioneurotic oedema, pruritus, exanthem)
<b>Psychiatric disorders</b>	
Uncommon:	Agitation, anxiety, nervousness, insomnia

<b>Nervous system disorders</b>	
Common:	Headache, tremor
Uncommon:	Dizziness
Very rare	Dysgeusia
<b>Cardiac disorders</b>	
Common:	Palpitations
Uncommon:	Tachycardia
Very rare	Oedema peripheral
<b>Respiratory, thoracic and mediastinal disorders</b>	
Uncommon	Bronchospasm, including bronchospasm paradoxical, throat irritation
<b>Gastrointestinal disorders</b>	
Uncommon	Dry mouth
Very rare:	Nausea
<b>Musculoskeletal and connective tissue disorders</b>	
Uncommon	Muscle cramps, myalgia

### Post-marketing experience

The following post-marketing events have been reported in patients treated with FORADIL. Because these reactions are reported voluntarily from a population of uncertain size, it is not possible to reliably estimate their frequency which is therefore categorized as not known. Adverse drug reactions are listed according to system organ classes in MedDRA. Within each system organ class, ADRs are presented in order of decreasing seriousness:

Metabolism and nutrition disorders: Hypokalaemia, hyperglycaemia

Cardiac disorders: cardiac arrhythmias e.g atrial fibrillation, angina pectoris, ventricular extrasystoles, tachyarrhythmia

Respiratory, thoracic and mediastinal disorders: Severe asthma exacerbation, cough

Skin and subcutaneous tissue disorders: Rash

Investigations: Electrocardiogram QT prolonged, blood pressure increased (including hypertension)

## Reporting of suspected adverse reactions

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

### 4.9 Overdose

#### Symptoms

An overdose of FORADIL is likely to lead to effects that are typical of beta2-adrenergic stimulants: nausea, vomiting, headache, tremor, drowsiness, palpitations, tachycardia, ventricular arrhythmias, metabolic acidosis, hypokalaemia, hyperglycaemia, hypertension.

#### Treatment

Supportive and symptomatic treatment is indicated. In serious cases, patients should be hospitalised.

Use of cardioselective beta-blockers may be considered, but only under the supervision of a physician and with extreme caution since the use of beta-adrenergic blocker medication may provoke bronchospasm.

**For advice on the management of overdose please contact the National Poisons Centre on 0800 POISON (0800 764766).**

## 5 PHARMACOLOGICAL PROPERTIES

### Pharmacotherapeutic Group and ATC

Pharmacotherapeutic group: Selective beta2-adrenergic agonist. ATC code: R03AC13

### Mechanism of Action

#### Pharmacodynamic properties

Formoterol is a potent selective beta2-adrenergic stimulant. It exerts a bronchodilator effect in patients with reversible airways obstruction. The effect sets in rapidly (within 1 to 3 minutes) and is still significant 12 hours after inhalation. At therapeutic doses cardiovascular effects are minor and occur only occasionally.

Formoterol inhibits the release of histamine and leukotrienes from passively sensitised human lung. Some anti-inflammatory properties, such as inhibition of oedema and inflammatory cell accumulation, have been observed in animal experiments.

*In vitro* studies on guinea pig trachea have indicated that racemic formoterol and its (R,R)- and (S,S)-enantiomers are highly selective beta2-adrenoceptor agonists. The (S,S)- enantiomer was 800 to 1,000 times less potent than the (R,R)-enantiomer and did not affect the activity of the (R,R)-enantiomer on tracheal smooth muscle. No pharmacological basis for the use of one of the two enantiomers in preference to the racemic mixture was demonstrated.

In man, FORADIL has been shown to be effective in preventing bronchospasm induced by inhaled allergens, exercise, cold air, histamine, or methacholine.

Formoterol administered by the Aerolizer inhaler at doses of 12 microgram b.i.d. and 24 microgram b.i.d. was shown objectively to provide rapid onset of bronchodilation in patients with stable COPD that was maintained over at least 12 hours, and which was accompanied by subjective improvement in Quality of Life using the Saint George's Respiratory Questionnaire.

### Clinical Trial Data

A randomized, placebo-controlled, double-blind study (Salmeterol Multi-center Asthma Research Trial or SMART) in long-acting beta2-adrenergic agonist-naïve patients with asthma was conducted to assess the safety of salmeterol, another long-acting beta2-adrenergic agonist, compared to placebo when added to usual asthma therapy for 28 weeks. In the total study population, a higher rate of asthma-related deaths (13/13,176 (0.10%) vs 3/13,179 (0.02%); RR 4.37, 95% CI 1.25, 15.34) occurred in patients treated with salmeterol than in patients treated with placebo. The relative risk of 4.37 indicates that salmeterol patients were 4.37 times more likely to experience asthma-related death than placebo patients. There was no difference in overall mortality in this study.

No study adequate to determine whether the rate or relative risk of asthma-related death is increased with formoterol has been conducted.

In two 12-week controlled trials with combined enrolment of 1095 patients 12 years of age and older, FORADIL 12 mcg twice daily was compared to FORADIL 24 mcg twice daily, albuterol 180 mcg four times daily, and placebo. Serious asthma exacerbations (acute worsening of asthma resulting in hospitalization) occurred more commonly with FORADIL 24 mcg twice daily than with FORADIL 12 mcg twice daily, albuterol, or placebo. The results are shown in the following table.

#### NUMBER AND FREQUENCY OF SERIOUS ASTHMA EXACERBATIONS IN PATIENTS 12 YEARS OF AGE AND OLDER FROM TWO 12-WEEK CONTROLLED CLINICAL TRIALS

	<b>Foradil (formoterol) 12mcg twice daily</b>	<b>Foradil (formoterol) 24mcg twice daily</b>	<b>Albuterol (salbutamol) 180mcg four times daily</b>	<b>Placebo</b>
<b>Trial #1</b>				
Serious asthma exacerbations	0/136 (0)	4/135 (3.0%) <sup>1</sup>	2/134 (1.5%)	0/136 (0)
<b>Trial #2</b>				
Serious asthma exacerbations	1/139 (0.7%)	5/136 (3.7%) <sup>2</sup>	0/138 (0)	2/141 (1.4%)

<sup>1</sup> 1 patient required hospitalisation

<sup>2</sup> 2 patients had respiratory arrest; 1 of the patients died

In a 16-week, randomized, multi-center, double-blind, parallel-group trial of 2085 patients, FORADIL Aerolizer 12 mcg twice daily was compared to FORADIL Aerolizer 24 mcg twice daily. Patients who received either 24 mcg twice daily, 12 mcg twice daily, or 12 mcg twice daily plus up to 2 additional doses per day as needed of FORADIL Aerolizer experienced a similar

number of serious asthma exacerbations as patients who received placebo. The results are shown in the following table.

**NUMBER AND FREQUENCY OF SERIOUS ASTHMA EXACERBATIONS IN PATIENTS 12 YEARS OF AGE AND OLDER FROM A 16-WEEK TRIAL**

	<b>Foradil (formoterol) 12mcg twice daily</b>	<b>Foradil (formoterol) 24mcg twice daily</b>	<b>Foradil 12mcg twice daily plus up to 2 additional doses per day</b>	<b>Placebo</b>
Serious asthma exacerbations	3/527 (0.6%)	2/527 (0.4%)	1/517 (0.2%)	1/514 (0.2%)

**Special Populations**

Gender:

After correction for body weight, formoterol pharmacokinetics did not differ significantly between males and females.

Geriatric:

The pharmacokinetics of formoterol have not been studied in the elderly population.

Paediatric:

In a study in 5- to 12-year-old children with asthma who were given 12 or 24 microgram formoterol fumarate twice daily by inhalation for 12 weeks, urinary excretion of unchanged formoterol increased by between 18 and 84% as compared to the amounts measured after the first dose. Accumulation in children did not exceed that in adults, where the increase was between 63 and 73% (see above). In the children studied, about 6% of the dose was recovered in the urine as unchanged formoterol.

Hepatic/Renal Impairment:

The pharmacokinetics of formoterol have not been studied in patients with hepatic or renal impairment.

**5.1 Pharmacokinetic properties**

**Pharmacokinetics**

FORADIL has a therapeutic dose range of 12 to 24 microgram b.i.d. Data on the plasma pharmacokinetics of formoterol was collected in healthy volunteers after inhalation of doses higher than the recommended range and in COPD patients after inhalation of therapeutic doses. Urinary excretion of unchanged formoterol, used as an indirect measure of systemic exposure, correlates with plasma drug disposition data. The elimination half-lives calculated for urine and plasma are similar.

**Absorption:**

Following inhalation of a single 120 microgram dose of formoterol fumarate by healthy volunteers, formoterol was rapidly absorbed into plasma, reaching a maximum concentration of 266 pmol/L within 5 min of inhalation. In COPD patients treated for 12 weeks with 12 or 24 microgram formoterol fumarate b.i.d., the mean plasma concentrations of formoterol ranged between 11.5 and 25.7 pmol/L and 23.3 and 50.3 pmol/L, respectively, 10 min, 2 hours and 6 hours after inhalation.

Studies investigating the cumulative urinary excretion of formoterol and/or its (R,R)- and (S,S)-enantiomers showed the amount of formoterol available in the circulation to increase in proportion to the inhaled dose (12 to 96 microgram).

After inhalation of 12 microgram or 24 microgram formoterol fumarate b.i.d. for 12 weeks, urinary excretion of unchanged formoterol increased by between 63 and 73% (last vs. first dose) in patients with asthma and by between 19 and 38% in COPD patients. This suggests some limited accumulation of formoterol in plasma with multiple dosing. There was no relative accumulation of one enantiomer over the other after repeated dosing.

As reported for other inhaled drugs, it is likely that most of the formoterol administered from an inhaler will be swallowed and then absorbed from the gastrointestinal tract. When 80 microgram of 3H-labeled formoterol fumarate were orally administered to two healthy volunteers, at least 65% of the drug was absorbed.

**Distribution:**

The plasma protein binding of formoterol was 61 to 64 %, and binding to human serum albumin was 34 %).

There is no saturation of binding sites in the concentration range reached with therapeutic doses.

**Biotransformation:**

Formoterol is eliminated primarily by metabolism, with direct glucuronidation being the major pathway of biotransformation. O-demethylation followed by glucuronidation is another pathway. Minor pathways involve sulphate conjugation of formoterol and deformylation followed by sulphate conjugation. Multiple isozymes catalyse the glucuronidation (UGT1A1, 1A3, 1A6, 1A7, 1A8, 1A9, 1A10, 2B7 and 2B15) and O-demethylation (CYP2D6, 2C19, 2C9 and 2A6) of formoterol, suggesting a low potential for drug-drug interactions though inhibition of a specific isozyme involved in formoterol metabolism. Formoterol did not inhibit cytochrome P450 isozymes at therapeutically relevant concentrations.

**Elimination:**

In asthmatic and COPD patients treated for 12 weeks with 12 or 24 microgram formoterol fumarate b.i.d., approximately 10% and 7% of the dose, respectively, were recovered in the urine as unchanged formoterol. The (R,R) and (S,S)-enantiomers accounted, respectively, for 40% and 60% of urinary recovery of unchanged formoterol, after single doses (12 to 120 microgram) in healthy volunteers, and after single and repeated doses in asthma patients.

The drug and its metabolites were completely eliminated from the body with about two-thirds of an oral dose being excreted in the urine, and one-third in the faeces. Renal clearance of formoterol from the blood was 150 mL/min.

In healthy volunteers, the terminal elimination half-life of formoterol in plasma after inhalation of a single 120 microgram dose of formoterol fumarate was 10 hours and the terminal elimination half-lives of the (R,R)- and (S,S)-enantiomers, as derived from the urinary excretion rates, were 13.9 and 12.3 hours, respectively.

## **5.2 Preclinical safety data**

### **Mutagenicity**

Mutagenicity tests covering a broad range of experimental endpoints have been conducted. No genotoxic effects were found in any of the *in vitro* or *in vivo* tests performed.

### **Carcinogenicity**

Two-year studies in rats and mice did not show any carcinogenic potential.

Male mice treated at very high dose levels showed a slightly higher incidence of benign adrenal subcapsular cell tumours. However, this finding was not seen in a second mouse feeding study, in which pathological changes at high doses consisted of an increased incidence both of benign smooth muscle tumours in the female genital tract, and of liver tumours in both sexes. Smooth muscle tumours are a known effect of beta-agonists given at high doses in rodents.

Two studies in rats, covering different dose ranges, showed an increase in mesovarial leiomyomas. These benign neoplasms are typically associated with long-term treatment of rats at high doses of beta 2-adrenergic drugs. Increased incidences of ovarian cysts and benign granulosa/thecal cell tumours were also seen; beta-agonists are known to have effects on the ovary in rats which are very likely specific to rodents. A few other tumour types noted in the first study using the higher doses were within the incidences of the historical control population, and were not seen in the lower-dose experiment.

None of the tumour incidences were increased to a statistically significant extent at the lowest dose of the second rat study, a dose leading to a systemic exposure 10 times higher than that expected from the maximum recommended dose of formoterol in humans.

On the basis of these findings and the absence of a mutagenic potential, it is concluded that use of formoterol at therapeutic doses does not present a carcinogenic risk.

### **Reproductive Toxicity Studies**

Animal tests have shown no teratogenic effects. After oral administration, formoterol was excreted in the milk of lactating rats.

## **6 PHARMACEUTICAL PARTICULARS**

### **6.1 List of excipients**

Lactose monohydrate (which contains milk proteins), gelatin.

### **6.2 Incompatibilities**

None known.

### **6.3 Shelf life**

2 years in alu/alu blisters

### **6.4 Special precautions for storage**

Do not store above 25°C.

Store in the original package (blister packs) together with the inhaler. Protect from moisture.

FORADIL must be kept out of the reach and sight of children.

### **6.5 Nature and contents of container**

Each pack contains 60 FORADIL 12mcg capsules in alu/alu blister packs and one Aerolizer inhaler device.

### **6.6 Special precautions for disposal and other handling**

#### **Instructions for use and handling**

To ensure proper administration of the drug, a physician or other health professional should:

- Show the patient how to use the inhaler.
- Dispense the capsule only together with the inhaler.
- Warn the patient that the capsules are only for inhalation use and not to be swallowed.

Detailed handling instructions are included in the package leaflet.

**It is important for the patient to understand that the gelatin capsule might fragment and small pieces of gelatin might reach the mouth or throat after inhalation. The tendency for this to happen is minimised by not piercing the capsule more than once. However, the capsule is made of edible gelatin, which is not harmful.**

The capsules should be removed from the blister pack **only immediately** before use.

## **7 MEDICINE SCHEDULE**

Prescription Medicine

## **8 SPONSOR**

Novartis New Zealand Limited  
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New Zealand

Telephone: 0800 354 335

**9 DATE OF FIRST APPROVAL**

13 January 1993

**10 DATE OF REVISION OF THE TEXT**

1 July 2020

**SUMMARY TABLE OF CHANGES**

<b>Section changed</b>	<b>Summary of new information</b>
8 Sponsor	Update to Sponsor address

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