

**ANNEX III**  
**LABELLING AND PACKAGE LEAFLET**

## **A. LABELLING**

**PARTICULARS TO APPEAR ON <THE OUTER PACKAGE>**

10 ml carton, 20 ml carton

**1. NAME OF THE VETERINARY MEDICINAL PRODUCT**

Alfaxan Multidose 10 mg/ml solution for injection for dogs and cats

Alfaxalone

**2. STATEMENT OF ACTIVE SUBSTANCES**

Active substance:  
Alfaxalone 10 mg/ml

**3. PHARMACEUTICAL FORM**

Solution for injection

**4. PACKAGE SIZE**

10 ml,  
20 ml

**5. TARGET SPECIES**

Dog, cat

**6. INDICATION(S)**

**7. METHOD AND ROUTE(S) OF ADMINISTRATION**

Read the package leaflet before use.  
For intravenous use.

**8. WITHDRAWAL PERIOD(S)**

**9. SPECIAL WARNING(S), IF NECESSARY**

User warnings:  
This product is a sedative. In case of accidental self-injection seek immediate medical attention.

**10. EXPIRY DATE**

EXP. (month/year).

Shelf-life after first opening the container: 28 days.  
Once broached use by.....

**11. SPECIAL STORAGE CONDITIONS**

Store below 25°C. Keep the vial in the outer carton in order to protect from light.

**12. SPECIAL PRECAUTIONS FOR THE DISPOSAL OF UNUSED PRODUCTS OR WASTE MATERIALS, IF ANY**

Any unused veterinary medicinal product or waste material derived from such veterinary medicinal product should be disposed of in accordance with local requirements.

**13. THE WORDS “FOR ANIMAL TREATMENT ONLY” AND CONDITIONS OR RESTRICTIONS REGARDING SUPPLY AND USE, IF APPLICABLE**

For animal treatment only.

**14. THE WORDS “KEEP OUT OF THE SIGHT AND REACH OF CHILDREN”**

Keep out of the sight and reach of children.

**15. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER**

Zoetis UK Limited  
1st Floor, Birchwood Building  
Springfield Drive  
Leatherhead  
Surrey  
KT22 7LP

**16. MARKETING AUTHORISATION NUMBER(S)**

Vm 42058/4221

**17. MANUFACTURER’S BATCH NUMBER**

Batch:

**MINIMUM PARTICULARS TO APPEAR ON SMALL IMMEDIATE PACKAGING UNITS**

10 ml vial, 20 ml vial

**1. NAME OF THE VETERINARY MEDICINAL PRODUCT**

Alfaxan Multidose 10 mg/ml solution for injection for dogs and cats

Alfaxalone

**2. QUANTITY OF THE ACTIVE SUBSTANCE(S)**

10 mg/ml

**3. CONTENTS BY WEIGHT, BY VOLUME OR BY NUMBER OF DOSES**

10 ml,  
20 ml

**4. ROUTE(S) OF ADMINISTRATION**

Read the package leaflet before use.  
For intravenous use.

**5. WITHDRAWAL PERIOD(S)**

**6. BATCH NUMBER**

Batch:

**7. EXPIRY DATE**

EXP. (month/year)

**8. THE WORDS "FOR ANIMAL TREATMENT ONLY"**

For animal treatment only.

## **B. PACKAGE LEAFLET**

**PACKAGE LEAFLET:**

Alfaxan Multidose 10 mg/ml solution for injection for dogs and cats

**1. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER AND OF THE MANUFACTURING AUTHORISATION HOLDER RESPONSIBLE FOR BATCH RELEASE, IF DIFFERENT**

Marketing Authorisation Holder:

Zoetis UK Limited  
1st Floor, Birchwood Building  
Springfield Drive  
Leatherhead  
Surrey  
KT22 7LP

Manufacturer responsible for batch release:

Jurox (Ireland) Limited  
The Black Church  
St. Mary's Place  
Dublin D07 P4AX  
Ireland.

Zoetis Belgium SA  
Rue Laid Burniat 1  
1348 Lovain-La-Neuve  
Belgium

**2. NAME OF THE VETERINARY MEDICINAL PRODUCT**

Alfaxan Multidose 10 mg/ml solution for injection for dogs and cats

**3. STATEMENT OF THE ACTIVE SUBSTANCE(S) AND OTHER INGREDIENTS**

Active substance:

Alfaxalone 10 mg/ml

Excipients:

Ethanol 150 mg/ml  
Chlorocresol 1 mg/ml  
Benzethonium chloride 0.2 mg/ml

Clear colourless solution for injection.

**4. INDICATION(S)**

As an induction agent prior to inhalation anaesthesia. As a sole anaesthetic agent for the induction and maintenance of anaesthesia for the performance of examination or surgical procedures.

## 5. CONTRAINDICATIONS

Do not use in combination with other intravenous anaesthetic agents.  
Do not use on animals with hypersensitivity to the active substance or any other excipients.

## 6. ADVERSE REACTIONS

In clinical studies using the veterinary medicinal product, post induction apnoea, which was defined as the cessation of breathing for 30 seconds or more, was very common (more than 1 in 10 animals treated displaying adverse reactions) in dogs and cats. 44% of dogs and 19% of cats experienced post induction apnoea. The mean duration of apnoea in these animals was 100 seconds in dogs and 60 seconds in cats. Endotracheal intubation and oxygen supplementation should therefore be employed.

Based on post marketing safety experience, neurological signs (convulsions, myoclonus, tremor, prolonged anaesthesia), cardio respiratory signs (cardiac arrests, bradycardia, bradypnea) and behavioural signs (hyperactivity, vocalisation) have been reported very rarely (less than 1 animal in 10,000 animals treated).

If you notice any side effects, including side effects not mentioned in this package leaflet, or you think that the medicine has not worked, please inform your veterinary surgeon.

Alternatively you can report via your national reporting system {national system details}

## 7. TARGET SPECIES

Dogs and cats.

## 8. DOSAGE FOR EACH SPECIES, ROUTE(S) AND METHOD OF ADMINISTRATION

For intravenous use.

### Induction of anaesthesia:

The induction dose of Alfaxan Multidose is based on data taken from controlled laboratory and field studies and is the amount of drug required for 9 of 10 patients (i.e. 90th percentile) to be successfully induced for anaesthesia.

Dosing recommendations for induction of anaesthesia are as follows:

	DOGS		CATS	
	Un-premedicated	Premedicated	Un-premedicated	Premedicated
mg/kg	3	2	5	5
ml/kg	0.3	0.2	0.5	0.5



The dosing syringe should be prepared to contain the above dose. Administration should continue until the clinician is satisfied that the depth of anaesthesia is sufficient for endotracheal intubation, or until the entire dose has been administered. The necessary injection rate can be achieved by administration of one quarter ( $\frac{1}{4}$ ) of the calculated dose every 15 seconds, so that the total dose, if required, would be administered over the first 60 seconds. If, 60 seconds after complete delivery of this first induction dose, intubation is still not possible, one further similar dose may be administered to effect.

**Maintenance of anaesthesia:**

Following induction of anaesthesia with Alfaxan Multidose, the animal may be intubated and maintained on Alfaxan Multidose or an inhalation anaesthetic agent. Maintenance doses of Alfaxan Multidose may be given as supplemental boluses or as constant rate infusion. Alfaxan Multidose has been used safely and effectively in both dogs and cats for procedures lasting for up to one hour. The following doses suggested for maintenance of anaesthesia are based on data taken from controlled laboratory and field studies and represent the average amount of drug required to provide maintenance anaesthesia for a dog or cat. However the actual dose will be based on the response of the individual patient.

Dosing recommendations for maintenance of anaesthesia are as follows:

	<b>DOGS</b>		<b>CATS</b>	
	<b>Un-premedicated</b>	<b>Premedicated</b>	<b>Un-premedicated</b>	<b>Premedicated</b>
<b>Dose for constant rate infusion</b>				
mg/kg/hour	8 - 9	6 - 7	10 - 11	7 - 8
mg/kg/minute	0.13 - 0.15	0.10 - 0.12	0.16 - 0.18	0.11 - 0.13
ml/kg/minute	0.013 - 0.015	0.010 - 0.012	0.016 - 0.018	0.011 - 0.013
<b>Bolus dose for each 10 minutes maintenance</b>				
mg/kg	1.3 - 1.5	1.0 - 1.2	1.6 - 1.8	1.1 - 1.3
ml/kg	0.13 - 0.15	0.10 - 0.12	0.16 - 0.18	0.11 - 0.13

Where maintenance of anaesthesia is with Alfaxan Multidose for procedures lasting more than 5 to 10 minutes, a butterfly needle or catheter can be left in the vein, and small amounts of Alfaxan Multidose injected subsequently to maintain the required level and duration of anaesthesia. In most cases the average duration of recovery when using Alfaxan Multidose for maintenance will be longer than if using an inhalant gas as a maintenance agent.

**9. ADVICE ON CORRECT ADMINISTRATION**

The use of a preplaced catheter in dogs and cats is recommended as best practice for anaesthetic procedures.

## **10. WITHDRAWAL PERIOD(S)**

## **11. SPECIAL STORAGE PRECAUTIONS**

Keep out of the sight and reach of children.

Keep the vial in the outer carton in order to protect from light.

Store below 25°C. Shelf life after first opening the container: 28 days.

Do not use this veterinary medicinal product after the expiry date which is stated on the carton after "EXP.". The expiry date refers to the last day of that month.

## **12. SPECIAL WARNING(S)**

### **Special warnings for each target species**

The analgesic properties of alfaxalone are limited, therefore appropriate peri-operative analgesia should be provided in cases where procedures are anticipated to be painful.

### **Special precautions for use in animals**

The safety of Alfaxan Multidose in animals less than 12 weeks of age has not been demonstrated.

Transient post induction apnoea frequently occurs, particularly in dogs – see Adverse Reactions for details. In such cases, endotracheal intubation and oxygen supplementation should be employed. Facilities for intermittent positive pressure ventilation should be available. In order to minimise the possibility of apnoea, administer by slow intravenous injection (over a period of approximately 60 seconds) and not as a rapid dose.

Especially when using higher doses of Alfaxan Multidose, a dose-dependent respiratory depression may occur. Oxygen and/or intermittent positive pressure ventilation should be administered to counteract the threatening hypoxaemia/hypercapnea. This should be particularly important in risky anaesthetic cases and whenever the anaesthesia is to be carried out for a longer period of time.

In both dogs and cats, the dose interval for maintenance of anaesthesia by intermittent bolus administration may require lengthening by more than 20%, or the maintenance dose by intravenous infusion may require reduction by more than 20%, when hepatic blood flow is severely diminished or hepatocellular injury is severe. In cats or dogs with renal insufficiency, doses for induction and maintenance may require reduction.

As with all general anaesthetic agents:

- It is advisable to ensure that dogs and cats have been fasted before receiving the anaesthetic.
- As with other intravenous anaesthetic agents, caution should be exercised in animals with cardiac or respiratory impairment, or in hypovolaemic or debilitated animals.
- Additional monitoring is advised and particular attention should be paid to respiratory parameters in aged animals, or in cases where there may be

additional physiological stress imposed by pre-existing pathology, shock or caesarean section.

- Following induction of anaesthesia, the use of an endotracheal tube is recommended to maintain airway patency.
- It is advisable to administer supplemental oxygen during maintenance of anaesthesia.
- Respiratory embarrassment may occur – ventilation of the lungs with oxygen should be considered if haemoglobin saturation with oxygen (SpO<sub>2</sub>%) falls below 90% or if apnoea persists for longer than 60 seconds.
- If cardiac arrhythmias are detected, attention to respiratory ventilation with oxygen is the first priority followed by appropriate cardiac therapy or intervention.

During recovery, it is preferable that animals are not handled or disturbed. In dogs and cats, this may lead to paddling, minor muscle twitching or movements that are more violent. While better avoided, such reactions are clinically insignificant. Post-anaesthetic recovery should thus take place in appropriate facilities and under sufficient supervision. Use of a benzodiazepine as the sole premedicant in dogs and cats may increase the probability of psychomotor excitement.

### **Special precautions to be taken by the person administering the veterinary medicinal product to animals:**

This product is a sedative, exercise caution to avoid accidental self-injection.

Preferably use a guarded needle until the moment of injection.

In case of accidental self-injection seek immediate medical attention and show the product literature.

The product may cause irritation if it comes into contact with the skin or eyes.

Rinse any splashes from skin or eyes immediately with water.

### **Use during pregnancy and lactation**

The safety of Alfaxan Multidose has not been established in cases where pregnancy is to be continued or during lactation. Its effects upon fertility have not been evaluated. However, studies using alfaxalone in pregnant mice, rats and rabbits have demonstrated no deleterious effects on gestation of the treated animals, or on the reproductive performance of their offspring. The product should be used in pregnant animals according to the risk-benefit assessment performed by the veterinarian. The product has been safely used in dogs for the induction of anaesthesia prior to delivery of puppies by caesarean section. In these studies, dogs were not premedicated, a dose of 1-2 mg/kg was drawn up (i.e. slightly lower than the usual 3 mg/kg dose, see Dosage section) and the product was administered as recommended, to effect.

### **Interaction with other veterinary medicinal products**

Alfaxan Multidose has been demonstrated to be safe when used in combination with the following premedicant classes:

<b>Drug Class</b>	<b>Examples</b>
Phenothiazines	Acepromazine maleate
Anticholinergic agents	Atropine sulfate
Benzodiazepines	Diazepam, midazolam hydrochloride,

Alpha-2-adrenoceptor agonists	Xylazine hydrochloride, medetomidine hydrochloride
Opiates	Methadone, morphine sulfate, butorphanol tartrate, buprenorphine hydrochloride
NSAIDs	Carprofen, meloxicam

The concomitant use of other CNS depressants should be expected to potentiate the depressant effects of Alfaxan Multidose, necessitating cessation of further administration of Alfaxan Multidose when the required depth of anaesthesia has been reached. The use of one premedicant or a combination of premedicants often reduces the dose of Alfaxan Multidose required.

Premedication with alpha-2-adrenoceptor agonists such as xylazine and medetomidine can markedly increase the duration of anaesthesia in a dose dependent fashion. In order to shorten recovery periods it may be desirable to reverse the actions of these premedicants. Benzodiazepines should not be used as sole premedicants in dogs and cats as the quality of anaesthesia in some patients may be sub-optimal. Benzodiazepines may be used safely and effectively in combination with other premedicants and Alfaxan Multidose.

Also refer to Contraindications section.

#### **Overdose (symptoms, emergency procedures, antidotes)**

Acute tolerance to overdose has been demonstrated up to 10 times the recommended dose of 2 mg/kg in the dog (i.e. up to 20 mg/kg) and up to 5 times the recommended dose of 5 mg/kg in the cat (i.e. up to 25 mg/kg). These excessive doses delivered over 60 seconds cause apnoea and a temporary decrease in mean arterial blood pressure. The decrease in blood pressure is not life threatening and is compensated for by changes in heart rate. These animals can be treated solely by intermittent positive pressure ventilation (if required) with either room air or, preferably, oxygen. Recovery is rapid with no residual effects.

#### **Incompatibilities**

In the absence of compatibility studies, Alfaxan Multidose must not be mixed with other veterinary medicinal products.

#### **13. SPECIAL PRECAUTIONS FOR THE DISPOSAL OF UNUSED PRODUCT OR WASTE MATERIALS, IF ANY**

Any unused veterinary medicinal product or waste material derived from such veterinary medicinal product should be disposed of in accordance with local requirements.

#### **14. DATE ON WHICH THE PACKAGE LEAFLET WAS LAST APPROVED**

August 2023

## 15. OTHER INFORMATION

**Pharmacodynamic properties:** Alfaxalone (3- $\alpha$ -hydroxy-5- $\alpha$ -pregnane-11,20-dione) is a neuroactive steroid molecule with properties of a general anaesthetic. The primary mechanism for the anaesthetic action of alfaxalone is modulation of neuronal cell membrane chloride ion transport, induced by binding of alfaxalone to GABA<sub>A</sub> cell surface receptors.

**Pharmacokinetic particulars:**

In cats following a single intravenous dose of alfaxalone at 5 mg/kg bw, the mean plasma elimination half-life ( $t_{1/2}$ ) is approximately 45 minutes. Plasma clearance is 25 ml/kg/min. Volume of distribution is 1.8 L/kg.

In dogs following a single intravenous dose of alfaxalone at 2 mg/kg bw, the mean plasma elimination half-life ( $t_{1/2}$ ) is approximately 25 minutes. Plasma clearance is 59 ml/kg/min. Volume of distribution is 2.4 L/kg.

In dogs and cats the elimination of alfaxalone demonstrates non-linear (dose-dependent) pharmacokinetics. Alfaxalone metabolites are likely to be eliminated from the dog and cat by the hepatic/faecal and renal routes, similar to other species.

**Pack sizes:**

Glass vials containing 10 ml or 20 ml.  
Not all pack sizes may be marketed.

For any information about this veterinary medicinal product, please contact the local representative of the marketing authorisation holder.

Approved 09 February 2024

