ANNEX II

LABELLING AND PACKAGE LEAFLET

A. LABELLING

PARTICULARS TO APPEAR ON THE OUTER PACKAGE

Carton box

1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Dexdormostart 0.5 mg/ml solution for injection

2. STATEMENT OF ACTIVE SUBSTANCES

Dexmedetomidine hydrochloride 0.5 mg/ml
(equivalent to 0.42 mg dexmedetomidine)/ml

3. PACKAGE SIZE

5 ml
10 ml
20 ml

4. TARGET SPECIES

Dogs and cats

5. INDICATIONS

6. ROUTES OF ADMINISTRATION

Dogs: IM, IV.
Cats: IM.

7. WITHDRAWAL PERIODS

8. EXPIRY DATE

Exp. {mm/yyyy}
Once broached use within 28 days.

9. SPECIAL STORAGE PRECAUTIONS

10. THE WORDS “READ THE PACKAGE LEAFLET BEFORE USE”

Read the package leaflet before use.

11. THE WORDS “FOR ANIMAL TREATMENT ONLY”

For animal treatment only.

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

Keep out of the sight and reach of children.

13. NAME OF THE MARKETING AUTHORISATION HOLDER

Alfasan Nederland B.V.

14. MARKETING AUTHORISATION NUMBERS

Vm 36408/3024

15. BATCH NUMBER

Lot {number}

MINIMUM PARTICULARS TO APPEAR ON SMALL IMMEDIATE PACKAGING UNITS

Glass vials of 5 mL (in a 10 mL vial)
Glass vials of 10 mL
Glass vials of 20 mL

1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Dexdormostart

2. QUANTITATIVE PARTICULARS OF THE ACTIVE SUBSTANCES

Dexmedetomidine hydrochloride 0.5 mg/ml

3. BATCH NUMBER

Lot {number}

4. EXPIRY DATE

Exp. {mm/yyyy}
Once broached use within 28 days

B. PACKAGE LEAFLET

PACKAGE LEAFLET

1. Name of the veterinary medicinal product

Dexdormostart 0.5 mg/ml solution for injection for dogs and cats

2. Composition

Each ml contains:

Active substances:

Dexmedetomidine hydrochloride (equivalent to 0.42 mg dexmedetomidine)	0.5 mg

Excipients:

Methyl parahydroxybenzoate (E218)	1.6 mg
Propyl parahydroxybenzoate	0.2 mg

Clear, colourless and practically free from particles solution for injection.

3. Target species

Dogs and cats

4. Indications for use

Non-invasive, mildly to moderately painful, procedures and examinations which require restraint,
sedation and analgesia in dogs and cats.

Deep sedation and analgesia in dogs in concomitant use with butorphanol for medical and minor
surgical procedures.

Premedication in dogs and cats before induction and maintenance of general anaesthesia.

5. Contraindications

Do not use in animals with cardiovascular disorders.
Do not use in animals with severe systemic disease or in animals that are moribund.
Do not use in cases of hypersensitivity to the active substance or to any of the excipients.

6. Special warnings

Special warnings:
The administration of dexmedetomidine to puppies younger than 16 weeks and kittens younger than 12 weeks has not been studied.

Special precautions for safe use in the target species:
Treated animals should be kept warm and at a constant temperature, both during the procedure and
recovery.

It is recommended that animals are fasted for 12 hours prior to administration of the veterinary medicinal product. Water may be given.

After treatment, the animal should not be given water or food before it is able to swallow.
Corneal opacity may occur during sedation. The eyes should be protected by a suitable lubricant.
To be used with precaution in elderly animals.
Nervous, aggressive or excited animals should be given the possibility to calm down before initiation of treatment.

Frequent and regular monitoring of respiratory and cardiac function should be performed. Pulse
oximetry may be useful but is not essential for adequate monitoring. Equipment for manual ventilation
should be available in case of respiratory depression or apnoea when dexmedetomidine and ketamine are used sequentially to induce anaesthesia in cats. It is also advisable to have oxygen readily available, should hypoxaemia be detected or suspected.

Sick and debilitated dogs and cats should only be premedicated with dexmedetomidine before induction and maintenance of general anaesthesia based on a risk-benefit assessment.
Use of dexmedetomidine as a pre-medicant in dogs and cats significantly reduces the amount of induction drug required for induction of anaesthesia. Attention should be given during the administration of intravenous induction drugs to effect. Volatile anaesthetic requirements for maintenance anaesthesia are also reduced.

Special precautions to be taken by the person administering the veterinary medicinal product to animals
This veterinary medicinal product is a sedative and can cause skin and/or eye irritation. Care should be taken to avoid skin, eye, mucosal contact and self-injection. The use of impermeable gloves is advisable.
In case of accidental contact of veterinary medicinal product with the skin or eyes, rinse with large amounts of fresh water. Remove contaminated clothes that are in direct contact with skin. If symptoms occur, seek medical advice. In case of accidental oral exposure or self-injection, seek medical advice immediately and show the package leaflet or the label to the physician but DO NOT DRIVE as sedation and changes in blood pressure may occur.

If pregnant women handle the veterinary medicinal product, special caution should be observed not to self-inject as uterine contractions and decreased foetal blood pressure may occur after accidental systemic exposure.

People with known hypersensitivity to the active substance and/or parabens should administer the veterinary medicinal product with caution.

Advice to physicians: The veterinary medicinal product is an a2-adrenoreceptor agonist, symptoms after absorption may involve clinical effects including dose-dependent sedation, respiratory depression, bradycardia, hypotension, a dry mouth, and hyperglycaemia. Ventricular arrhythmias have also been reported. Respiratory and haemodynamic symptoms should be treated symptomatically. The specific a2-adrenoceptor antagonist, atipamezole, which is approved for use in animals, has been used in humans only experimentally to antagonize dexmedetomidine-induced effects.

Pregnancy
The safety of dexmedetomidine has not been established during pregnancy in the target species. Therefore the use of the product during pregnancy is not recommended.

Lactation:
The safety of dexmedetomidine has not been established during lactation in the target species. Therefore the use of the product during lactation is not recommended.

Fertility:
The safety of dexmedetomidine has not been established in males intended for breeding

Interaction with other medicinal products and other forms of interaction:
The use of other central nervous system depressants is expected to potentiate the effects of
dexmedetomidine and therefore an appropriate dose adjustment should be made. Anticholinergics should be used with caution with dexmedetomidine.

Administration of atipamezole after dexmedetomidine rapidly reverses the effects and thus shortens the recovery period. Within 15 minutes dogs and cats are normally awake and standing.

Cats: After administration of 40 micrograms dexmedetomidine/kg bw intramuscularly concurrently with 5 mg ketamine/kg bw to cats, the maximum concentration of dexmedetomidine increased twofold but there was no effect on Tmax. The mean half-life of elimination of dexmedetomidine increased to 1.6 h and the total exposure (AUC) increased by 50%.

A dose of 10 mg ketamine/ kg used concurrently with 40 micrograms dexmedetomidine/ kg may cause
tachycardia.

Overdose:
Dogs: In cases of overdosage, or if the effects of dexmedetomidine become potentially life-threatening, the appropriate dose of atipamezole is 10 times the initial

dose of dexmedetomidine (micrograms/ kg bw or micrograms/ square meter body surface area). The dose volume of atipamezole at the concentration of 5 mg/ml equals the dose volume of this veterinary medicinal product that was given to the dog, regardless of route of administration of dexmedetomidine.

Cats: In cases of overdosage, or if the effects of dexmedetomidine become potentially life-threatening,
the appropriate antagonist is atipamezole, administered by intramuscular injection, at the following
dose: 5 times the initial dose dexmedetomidine in micrograms/kg bw.
After concurrent exposure to a triple (3X) overdose of dexmedetomidine and 15 mg ketamine/ kg,
atipamezole can be administered at the recommended dose level for reversal of effects induced by
dexmedetomidine. At high serum concentrations of dexmedetomidine sedation is not increased although the level of analgesia does increase with further dose increases. The dose volume of atipamezole at the concentration of 5 mg/ml equals one-half the volume of this veterinary medicinal product that was given to the cat.

Special restrictions for use and special conditions for use:

Major incompatibilities:
In the absence of compatibility studies, this veterinary medicinal product must not be mixed with other veterinary medicinal products.

7. Adverse events

Dogs:

Very common (> 1 animal / 10 animals treated):	Bradycardia[1] Pale or cyanotic mucous membranes[2]
Rare (1 to 10 animals / 10,000 animals treated):	Pulmonary oedema.
Undetermined frequency (cannot be estimated from the available data)	Change in blood pressure[3]. Bradypnoea. Hypothermia[1]. Vomiting[4]. Muscle tremor[5]. Corneal opacity[6].
When dexmedetomidine and butorphanol are used concomitantly:	
Common (1 to 10 animals / 100 animals treated):	Arrhythmia[7]
Undetermined frequency (cannot be estimated from the available data)	Bradypnoea, tachypnoea, irregular breathing[8], hypoxia. Muscle twitching or tremor or paddling. Excitation, sudden arousal, prolonged sedation. Hypersalivation. Retching, vomiting.

	Urination. Erythema.
When dexmedetomidine is used as a pre-medicant:	
Rare (1 to 10 animals / 10,000 animals treated):	Arrhythmia[9].
Undetermined frequency (cannot be estimated from the available data)	Arrhythmia[10]. Bradypnoea, tachypnoea. Vomiting.

[1] By virtue of the α2-adrenergic activity of dexmedetomidine.
[2] Due to peripheral vasoconstriction and venous desaturation in the presence of normal arterial oxygenation.
[3] Blood pressure will increase initially and then return to normal or below normal.
[4] May occur 5–10 minutes after injection. Some dogs and cats may also vomit at the time of recovery.
[5] May occur during sedation.
[6] May occur if the eyes stay open during sedation. The eyes should be protected by a suitable eye lubricant (see also section Special warnings: Special precautions for safe use in the target species).
[7] Brady- and tachyarrhythmias. These may include profound sinus bradycardia, 1st and 2nd degree AV block, sinus arrest or pause, as well as atrial, supraventricular and ventricular premature complexes.
[8] 20-30 sec apnoea followed by several rapid breaths.
[9] Supraventricular and ventricular premature complexes, sinus pause and 3rd degree AV block.
[10] Brady- and tachyarrhythmias have been reported and include profound sinus bradycardia, 1st and 2nd degree AV block and sinus arrest.

Cats:

Very common (> 1 animal / 10 animals treated):	Bradycardia[1]. Vomiting[2]. Pale or cyanotic mucous membranes[3].
Rare (1 to 10 animals / 10,000 animals treated):	Pulmonary oedema.
Undetermined frequency (cannot be estimated from the available data)	Change in blood pressure[4]. Bradypnoea. Hypothermia[1]. Muscle tremor[5]. Corneal opacity[6].
When dexmedetomidine and ketamine are used sequentially (with a 10 min interval):	
Very common (> 1 animal / 10 animals treated):	AV-block.
Common (1 to 10 animals / 100 animals treated):	Hypoxia/Decreased pulse oxygenation[7]. Hypothermia.

Uncommon (1 to 10 animals / 1,000 animals treated)	Apnoea.
Undetermined frequency (cannot be estimated from the available data)	Bradypnoea, irregular breathing, hypoventilation. Vomiting. Extrasystole. Nervousness.
When dexmedetomidine is used as a pre-medicant:	
Very common (> 1 animal / 10 animals treated):	Arrhythmia[8, 9].
Common (1 to 10 animals / 100 animals treated)	Sinus bradycardia[8], sinus arrhythmia[8], supraventricular and nodal arrhythmia. Retching.
Uncommon (1 to 10 animals / 1,000 animals treated)	1st degree AV block[8].
Undetermined frequency (cannot be estimated from the available data)	Vomiting. Pale mucous membranes. Hypothermia.

[1] By virtue of the α2-adrenergic activity of dexmedetomidine.
[2] May occur 5–10 minutes after injection. Some dogs and cats may also vomit at the time of recovery.
[3] Due to peripheral vasoconstriction and venous desaturation in the presence of normal arterial oxygenation.
[4] Blood pressure will increase initially and then return to normal or below normal.
[5] May occur during sedation.
[6] May occur if the eyes stay open during sedation. The eyes should be protected by a suitable eye lubricant (see also section Special warnings: Special precautions for safe use in the target species).
[7] Especially within the 15 first minutes of anaesthesia.
[8] After intramuscular dosing at 40 micrograms/kg (followed by ketamine or propofol).
[9] Supraventricular premature complexes, atrial bigeminy, sinus pauses, 2nd degree AV block, escape beats/rhythms.

Reporting adverse events is important. It allows continuous safety monitoring of a product. If you notice any side effects, even those not already listed in this package leaflet, or you think that the medicine has not worked, please contact, in the first instance, your veterinarian. You can also report any adverse events to the marketing authorisation holder, the local representative of the marketing authorisation holder using the contact details at the end of this leaflet, or via your national reporting system.

8. Dosage for each species, routes and method of administration

Dogs: intravenous or intramuscular use
Cats: intramuscular use

The product is not intended for repeat injections.

To ensure a correct dosage, body weight should be determined as accurately as possible.

Dosage: the following doses are recommended:

DOGS:
Dexmedetomidine doses are based on body surface area:
Intravenously: up to 375 micrograms/square metre body surface area
Intramuscularly: up to 500 micrograms/square metre body surface area

When administering in conjunction with butorphanol (0.1 mg/kg) for deep sedation and analgesia, the intramuscular dose of dexmedetomidine is 300 micrograms/square metre body surface area. The premedication dose of dexmedetomidine is 125–375 micrograms/square metre body surface area, administered 20 minutes prior to induction for procedures requiring anaesthesia. The dose should be adjusted to the type of surgery, length of procedure and patient temperament.

Concomitant use of dexmedetomidine and butorphanol produces sedative and analgesic effects beginning no later than 15 minutes after administration. The peak sedative and analgesic effects are reached within 30 minutes after administration. Sedation lasts for at least 120 minutes post administration and analgesia lasts for at least 90 minutes. Spontaneous recovery occurs within 3 hours.

Premedication with dexmedetomidine will significantly reduce the dosage of the induction agent required and will reduce volatile anaesthetic requirements for maintenance anaesthesia. In a clinical study, the requirement for propofol and thiopental was reduced by 30% and 60% respectively. All anaesthetic agents used for induction or maintenance of anaesthesia should be administered to effect. In a clinical study, dexmedetomidine contributed to postoperative analgesia for 0.5–4 hours. However this duration is dependent on a number of variables and further analgesia should be administered in accordance with clinical judgement.

The corresponding doses based on body weight are presented in the following tables. Use of an appropriately graduated syringe is recommended to ensure accurate dosing when administering small volumes.

Dog weight (kg)	**Dexmedetomidine 125 mcg/m^2 (mcg/kg)**	**(ml)**	**Dexmedetomidine 375 mcg/m^2 (mcg/kg)**	**(ml)**	**Dexmedetomidine 500 mcg/m^2 (mcg/kg)**	**(ml)**
2-3	9.4	0.04	28.1	0.12	40	0.15
3-4	8.3	0.05	25	0.17	35	0.2
4-5	7.7	0.07	23	0.2	30	0.3
5-10	6.5	0.1	19.6	0.29	25	0.4
10-13	5.6	0.13	16.8	0.38	23	0.5
13-15	5.2	0.15	15.7	0.44	21	0.6
15-20	4.9	0.17	14.6	0.51	20	0.7
20-25	4.5	0.2	13.4	0.6	18	0.8
25-30	4.2	0.23	12.6	0.69	17	0.9
30-33	4	0.25	12	0.75	16	1.0

33-37	3.9	0.27	11.6	0.81	15	1.1
37-45	3.7	0.3	11	0.9	14.5	1.2
45-50	3.5	0.33	10.5	0.99	14	1.3
50-55	3.4	0.35	10.1	1.06	13.5	1.4
55-60	3.3	0.38	9.8	1.13	13	1.5
60-65	3.2	0.4	9.5	1.19	12.8	1.6
65-70	3.1	0.42	9.3	1.26	12.5	1.7
70-80	3	0.45	9	1.35	12.3	1.8
>80	2.9	0.47	8.7	1.42	12	1.9

For deep sedation and analgesia with butorphanol		
Dog weight (kg)	**Dexmedetomidine 300 mcg/m² intramuscularly**	
	(mcg/kg)	**(ml)**
2-3	24	0.12
3-4	23	0.16
4-5	22.2	0.2
5-10	16.7	0.25
10-13	13	0.3
13-15	12.5	0.35
15-20	11.4	0.4
20-25	11.1	0.5
25-30	10	0.55
30-33	9.5	0.6
33-37	9.3	0.65
37-45	8.5	0.7
45-50	8.4	0.8
50-55	8.1	0.85
55-60	7.8	0.9
60-65	7.6	0.95
65-70	7.4	1
70-80	7.3	1.1
>80	7	1.2

CATS:
The dosage for cats is 40 micrograms dexmedetomidine hydrochloride/kg bw equal to a dose volume 0.08 ml product/kg bw when used for non-invasive, mildly to moderately painful procedures requiring restraint, sedation and analgesia.

When dexmedetomidine is used for premedication in cats, the same dose is used. Premedication with dexmedetomidine will significantly reduce the dosage of the induction agent required and will reduce volatile anaesthetic requirements for maintenance anaesthesia. In a clinical study, the requirement for propofol was reduced by 50%. All anaesthetic agents used for induction or maintenance of anaesthesia should be administered to effect.

Anaesthesia can be induced 10 minutes after premedication by intramuscular administration of a target dose of 5 mg ketamine/ kg bw or by intravenous administration of propofol to effect. Dosing for cats is presented in the following table.

Cat weight (kg)	Dexmedetomidine 40 mcg/kg intramuscularly (mcg/kg)	(ml)
1-2	40	0.1
2-3	40	0.2
3-4	40	0.3
4-6	40	0.4
6-7	40	0.5
7-8	40	0.6
8-10	40	0.7

The expected sedative and analgesic effects are reached within 15 minutes after administration and are maintained up to 60 minutes after administration. Sedation may be reversed with atipamezole.
Atipamezole should not be administered prior to 30 minutes following ketamine administration.

9. Advice on correct administration

The stoppers should not broached more than 30 times.

10. Withdrawal periods

Not applicable.

11. Special storage precautions

Keep out of the sight and reach of children.
This veterinary medicinal product does not require any special storage conditions.
Do not use this veterinary medicinal product after the expiry date which is stated on the label after Exp. The expiry date refers to the last day of that month.
Shelf life after first opening the immediate package: 28 days.

12. Special precautions for disposal

Medicines should not be disposed of via wastewater or household waste.
Use take-back schemes for the disposal of any unused veterinary medicinal product or waste materials derived thereof in accordance with local requirements and with any applicable national collection systems. These measures should help to protect the environment.

13. Classification of veterinary medicinal products

Veterinary medicinal product subject to prescription.

14. Marketing authorisation numbers and pack sizes

Vm 36408/3024

Cardboard box with 1 vial containing 5 ml, 10 ml or 20 ml.
Not all pack sizes may be marketed.

15. Date on which the package leaflet was last revised

Detailed information on this veterinary medicinal product is available in the Union Product Database (https://medicines.health.europa.eu/veterinary).

16. Contact details

Marketing authorisation holder and manufacturer responsible for batch release and contact details to report suspected adverse reactions:

Alfasan Nederland B.V.
Kuipersweg 9
3449 JA Woerden
The Netherlands
Tel: +31(0)348 416945

Local representatives and contact details to report suspected adverse reactions:

17. Other information

Approved 01 February 2024