

SUMMARY OF PRODUCT CHARACTERISTICS

1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Presedine 10 mg/ml Solution for Injection for Horses

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Active ingredient:

Detomidine hydrochloride (equivalent to 8.36 mg/ml detomidine)	10 mg/ml
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Excipients:

Methyl parahydroxybenzoate (E 218)	1 mg/ml
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For the full list of excipients, see Section 6.1.

3. PHARMACEUTICAL FORM

Solution for Injection
Clear, colourless solution of pH 4.3

4. CLINICAL PARTICULARS

4.1 Target species

Horses

4.2 Indications for use, specifying the target species

A sedative with analgesic properties used to facilitate handling of horses for examination, minor surgical interventions and other manipulations. It can be used with or without butorphanol.

The product is also indicated for use with ketamine for short duration general anaesthesia to carry out surgical procedures such as castration.

4.3 Contraindications

Do not use in conjunction with sympathomimetic amines or with intravenous potentiated sulphonamides.

Do not administer simultaneously with ketamine in the same syringe (see sections 4.8 and 4.9).

Do not use the butorphanol combination in horses suffering from colic. Do not use in seriously ill animals with heart failure or impaired liver or kidney function.

Do not use in case of hypersensitivity to the active substance or to any of the excipients.

Do not administer to horses in the last month of pregnancy.

4.4 Special warnings for each target species

None

4.5 Special precautions for use

i) Special precautions for use in animals

The product should not be used in horses with pre-existing AV blocks, with severe cardiac insufficiency, respiratory disease or chronic renal failure.

Careful consideration should be given prior to administration to animals in shock and to animals with liver or kidney disease.

Intravenous administration should be slow.

It is recommended that feed should be withheld for at least 12 hours prior to anaesthesia.

The horse should not be given water or feed before the drug effect has passed.

Routine safety measures should be employed to protect practitioners and handlers

ii) Special precautions to be taken by the person administering the veterinary medicinal product to animals

In the case of accidental oral intake or self-injection, seek medical advice immediately and show the package leaflet to the doctor but **DO NOT DRIVE** as sedation and changes in blood pressure may occur.

Avoid skin, eye or mucosal contact.

Immediately after exposure, wash the exposed skin with large amounts of fresh water.

Remove contaminated clothes that are in direct contact with skin.

In the case of accidental contact of the product with eyes, rinse with large amounts of fresh water. If symptoms occur, seek the advice of a doctor.

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

Advice to the Doctor:

Detomidine hydrochloride is an alpha-2 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.

iii) Other precautions

Not applicable.

4.6 Adverse reactions (frequency and seriousness)

Adverse reactions are very rare. All alpha-2 adrenoreceptor agonists, including detomidine, may cause decreased heart rate, changes in the conductivity of cardiac muscle (as evidenced by partial atrioventricular and sinoatrial blocks), changes in the respiratory rate, incoordination/ataxia and sweating.

A diuretic effect is usually observed within 45 to 60 minutes after treatment.

The potential for isolated cases of hypersensitivity exists, including paradoxical response (excitation).

Partial, transient penis prolapse may occur in male horses.

In rare cases, horses may show signs of mild colic following administration of alpha-2 adrenoreceptor agonists because substances of this class inhibit intestinal motility.

Occasional reports of urticaria have been received. Mild adverse reactions have reportedly resolved without treatment. Severe reactions should be treated symptomatically.

The frequency of adverse reactions is defined using the following convention:

- very common (more than 1 in 10 animals displaying adverse reaction(s) during the course of one treatment)
- common (more than 1 but less than 10 animals in 100 animals)
- uncommon (more than 1 but less than 10 animals in 1,000 animals)
- rare (more than 1 but less than 10 animals in 10,000 animals)
- very rare (less than 1 animal in 10,000 animals, including isolated reports)

4.7 Use during pregnancy, lactation or lay

Not to be used in mares in the last month of pregnancy.
No studies have been conducted in mares; however trace amounts of detomidine have been detected in the milk of cows treated with the product.

The safety of the product has not been investigated in breeding horses; use only according to benefit/risk assessment during the other months of pregnancy.

4.8 Interaction with other medicinal products and other forms of interaction

Use with care with other sedatives and anaesthetics because of an additive/synergistic effect.

Where appropriate the product may be used in conjunction with local anaesthetic agents.

Induction of anaesthesia with detomidine and ketamine has been used prior to maintenance with halothane. Because of the nature of the induction agents, the effects of halothane may be delayed and special care must be taken to avoid over-dosage.

When detomidine is used as a premedication prior to general anaesthesia, the product may delay onset of induction.

Use in conjunction with sympathomimetic amines and intravenous potentiated sulphonamides is contra-indicated.

4.9 Amount(s) to be administered and administration route

The product alone

To be administered intramuscularly or by slow intravenous injection at a concentration of 10-80 µg detomidine / kg bodyweight depending on the degree of sedation required.

Detomidine/butorphanol combination

Dosage: 0.1 ml product/100 kg (10 µg/kg detomidine hydrochloride) intravenously, followed within 5 minutes by a dose rate in the region of 25 µg/kg butorphanol, intravenously. Clinical experience has shown that 5 mg detomidine and 10 mg butorphanol affords effective, safe sedation in horses above 200 kg bodyweight.

Detomidine/ketamine combination (short duration anaesthesia)

Ketamine must not be used as the sole anaesthetic agent in horses. It is always necessary to administer detomidine prior to ketamine and to allow sufficient time (5 minutes) for sedation to develop. The two agents must therefore never be administered simultaneously in the same syringe. It is important that, to obtain satisfactory surgical anaesthesia the following procedure is followed: Administer the product at a dose rate of 20 µg/kg by slow intravenous injection.

Allow 5 minutes for the horse to become deeply sedated then administer ketamine at a dose rate of 2.2 mg/kg as an intravenous bolus.

Onset of anaesthesia is gradual, the horse taking approximately 1 minute to become recumbent. In large fit horses recumbency may take up to 3 minutes. Anaesthesia will continue to deepen for a further 1-2 minutes and during this time the horse should be left quietly. Horses regain sternal recumbency approximately 20 minutes post ketamine administration.

The duration of surgical anaesthesia is approximately 10-15 minutes.

The horse should be allowed to stand in its own time. The horse may be ataxic if it stands prematurely and therefore it should be encouraged to remain recumbent.

To facilitate handling and the administration of the induction agents, some horses have received acepromazine by intramuscular injection at a dose rate of 0.03 mg/kg at least 45 minutes before induction of anaesthesia.

Excitable horses are sometimes poor subjects for anaesthesia. It is a prime requisite that the horse should be quietly and carefully handled during the administration of the anaesthetic agents so as to ensure the minimum amount of upset during the induction period. If the horse fails to become sedated following the injection of the product, then ketamine should not be injected and the anaesthesia procedure should be abandoned.

4.10 Overdose (symptoms, emergency procedures, antidotes), if necessary

Overdose may cause cardiac arrhythmia, hypotension, delayed recovery, and deep depression of the central nervous system and the respiratory system. If recovery is delayed, it should be ensured that the animal can recover in a quiet and warm place. An oxygen supplement may be indicated in circulatory and respiratory depression.

In cases of overdose, or should the effects become life-threatening, an alpha-2 antagonist (atipamezole) is recommended (5-10 times the dose of detomidine in µg/kg).

AV blocks may be prevented by IV administration of atropine at 0.005 - 0.02 mg/kg. Atropine raises the heart rate but may cause arrhythmias and should be used with caution.

4.11 Withdrawal period(s)

Meat and offal: 1 Day
Milk: 12 hours

5. PHARMACOLOGICAL PROPERTIES

Pharmacotherapeutic group: sedative and analgesic

ATC Vet Code: QN05CM90

5.1 Pharmacodynamic properties

The active ingredient of the product is 4-(2, 3-dimethylbenzyl)- Imidazole-hydrochloride (INN: detomidine). Detomidine leads to sedation of treated animals and relieves pain, with duration and intensity of effect being dose related. Detomidine acts as an agonist at alpha-2 adrenoceptors, and observed analgesic effects are due to inhibition of transmission of the pain impulse within the CNS.

Detomidine acts on peripheral alpha-adrenoceptors, therefore an increase in blood glucose level and at higher dosages piloerection, sweating and diuresis may occur. An initial increase in mean blood pressure is observed, which returns to normal or slightly below and heart rate decreases. The ECG shows an enlarged PR-interval, and mild atrio-ventricular blocks may be observed. These changes are transient.

Respiratory response includes an initial decrease in respiration rate, increasing to normal or slightly higher values within a few minutes.

5.2 Pharmacokinetic particulars

Detomidine is absorbed rapidly after intramuscular injection, with a Tmax of 15-30 minutes. Bioavailability after intramuscular administration is 66-85 %. After rapid distribution of detomidine into the tissues, with a half-life of 0.15 hours post intravenous injection, detomidine is almost completely metabolized, mainly in the liver - $t_{1/2}$ is 1 to 2 hours. Metabolites are mainly excreted via urine and faeces.

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Methyl parahydroxybenzoate (E218)
Sodium Chloride
Hydrochloric acid, diluted
Sodium hydroxide
Water for injections

6.2 Major Incompatibilities

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

6.3 Shelf life

Shelf life of the veterinary medicinal product as packaged for sale: 30 months
Shelf life after first opening the immediate packaging: 28 days

6.4 Special precautions for storage

This veterinary medicinal product does not require any special storage conditions.

6.5 Nature and composition of immediate packaging

10 ml and 20 ml type I glass vial with bromobutyl rubber stopper and aluminium cap. Individual vials are presented in a cardboard box.

Pack sizes:

5 ml (in a 10 ml sized vial)

10 ml

20 ml

Not all pack sizes may be marketed.

6.6 Special precautions for the disposal of unused veterinary medicinal product or waste materials derived from the use of such products

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

7. MARKETING AUTHORISATION HOLDER

Alfasan Nederland B.V.
Kuipersweg 9
3449 JA Woerden
The Netherlands

8. MARKETING AUTHORISATION NUMBER

Vm 36408/5019

9. DATE OF FIRST AUTHORISATION

24 August 2023

10. DATE OF REVISION OF THE TEXT

August 2023

PROHIBITION OF SALE, SUPPLY AND/OR USE

POM-V ('To be supplied only on veterinary prescription')

Approved 24 August 2023

