LABELLING AND PACKAGE LEAFLET

A. LABELLING

PARTICULARS TO APPEAR ON THE OUTER PACKAGE

Outer carton

1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Anaestamine 100 mg/ml solution for injection
Ketamine

2. STATEMENT OF ACTIVE SUBSTANCES

Each ml contains:

Active substance:
Ketamine 100 mg
(equivalent to 115.34 mg ketamine hydrochloride)

3. PHARMACEUTICAL FORM

Solution for injection

4. PACKAGE SIZE

10 ml
25 ml
50 ml

5. TARGET SPECIES

Dogs, cats, cattle, sheep, goats, horses, pigs, guinea pigs, hamsters, rabbits, rats, mice

6. INDICATION(S)

7. METHOD AND ROUTE(S) OF ADMINISTRATION

For intravenous, intramuscular and intraperitoneal use.
Read the package leaflet before use.

8. WITHDRAWAL PERIOD(S)

Withdrawal period(s):
Cattle, sheep, goats and horses:
Meat and offal : 1 day.
Milk : zero days.

Pigs :
Meat and offal : 1 day.

9. SPECIAL WARNING(S), IF NECESSARY

Read the package leaflet before use.

Accidental injection is dangerous.

10. EXPIRY DATE

EXP {month/year}
Shelf life after first opening the container: 28 days
Once broached use by…

11. SPECIAL STORAGE CONDITIONS

Store the vial in the original packaging in order to protect from light. Store the vial upright.

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

Disposal: read package leaflet.

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

For animal treatment only. To be supplied only on veterinary prescription.

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

Le Vet Beheer B.V.
Wilgenweg 7
3421 TV Oudewater
The Netherlands

16. MARKETING AUTHORISATION NUMBER

Vm 41821/4011

17. MANUFACTURER'S BATCH NUMBER

Lot {number}

MINIMUM PARTICULARS TO APPEAR ON SMALL IMMEDIATE PACKAGING UNITS

Glass vials of 10, 25 or 50 ml

1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Anaestamine 100 mg/ml solution for injection
Ketamine

2. QUANTITY OF THE ACTIVE SUBSTANCE(S)

Ketamine 100 mg/ml (equivalent to 115.34 mg/ml ketamine hydrochloride)

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

10 ml
25 ml
50 ml

4. ROUTE(S) OF ADMINISTRATION

IV, IM, IP

5. WITHDRAWAL PERIOD(S)

Withdrawal period(s):
Cattle, sheep, goats and horses:
Meat and offal : 1 day.
Milk : zero days.

Pigs :
Meat and offal : 1 day.

6. BATCH NUMBER

Lot {number}

7. EXPIRY DATE

EXP {month/year}
Once broached use within 28 days.

8. THE WORDS "FOR ANIMAL TREATMENT ONLY"

For animal treatment only.

B. PACKAGE LEAFLET

PACKAGE LEAFLET:

Anaestamine 100 mg/ml solution for injection

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

Marketing authorisation holder:
Le Vet Beheer B.V.
Wilgenweg 7
3421 TV Oudewater
The Netherlands

Manufacturer responsible for batch release:
Produlab Pharma B.V.
Forellenweg 16
4941 SJ Raamsdonksveer
The Netherlands

2. NAME OF THE VETERINARY MEDICINAL PRODUCT

Anaestamine 100 mg/ml solution for injection
Ketamine

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

Each ml contains:

Active substance:
Ketamine 100 mg
(equivalent to 115.34 mg ketamine hydrochloride)

Excipient(s):
Chlorocresol 1 mg

Clear, colourless aqueous solution.

4. INDICATION(S)

The product may be used in combination with a sedative for:
- Immobilisation
- Sedation
- General anaesthesia

5. CONTRAINDICATIONS

Do not use in animals presenting with:
- severe hypertension,
- cardio-respiratory deficiency,
- hepatic or renal dysfunction.

Do not use in animals with glaucoma.
Do not use in animals with eclampsia or pre-eclampsia.
Do not use in cases of hypersensitivity to the active substance or to any of the excipients.
Do not use the product as a sole anaesthetic agent in any species.
Do not use for surgical intervention on pharynx, larynx, trachea or bronchial tree, if sufficient relaxation is not ensured by administration of a muscle relaxant (intubation obligatory).Do not use in ocular surgical interventions.
Do not use in animals undergoing a myelogram procedure.
Do not use in patients with pheochromocytoma or untreated hyperthyroidism.

6. ADVERSE REACTIONS

Emergence reactions - ataxia, hypersensitivity to stimuli, excitation – have been reported in horses and dogs rarely and very rarely respectively.
Salivation in cats has been reported very rarely.
Increased tonus of skeletal muscles in cats, dogs, horses, rabbits, cattle and goats has been reported very rarely.
Dose-related respiratory depression, which may lead to respiratory arrest in cats, dogs, rabbits, cattle and goats has been reported very rarely. Combination with respiratory depressant products may increase this respiratory effect.
Increased heart rate in cats and dogs has been reported very rarely.
Increased arterial blood pressure with concurrent increased bleeding tendency in dogs has been reported very rarely.
Eyes that remain open with mydriasis and nystagmus have been reported in cats very rarely.
Pain on intramuscular injection in cats has been reported very rarely.
All adverse reactions and frequencies are from spontaneous reports.

The frequency of adverse reactions is defined using the following convention:
- very common (more than 1 in 10 animals treated displaying adverse reaction(s))
- common (more than 1 but less than 10 animals in 100 animals treated)
- uncommon (more than 1 but less than 10 animals in 1,000 animals treated)
- rare (more than 1 but less than 10 animals in 10,000 animals treated)
- very rare (less than 1 animal in 10,000 animals treated, including isolated reports).>

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 inform your veterinary surgeon.

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

7. TARGET SPECIES

Dogs, cats, cattle, sheep, goats, horses, pigs, guinea pigs, hamsters, rabbits, rats, mice.

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

For intravenous and intramuscular use.
In laboratory animals, intraperitoneal use is also possible..

One dose of 10 mg of ketamine per kg bodyweight corresponds to 0.1 ml of a 100 mg/ml solution per kg bodyweight.

Before ketamine is administered, please ensure that the animals are adequately sedated.

DOG
Combination with xylazine or medetomidine
Xylazine (1.1 mg/kg IM) or medetomidine (10 to 30 µg/kg IM) can be used with Ketamine (5 to 10 mg/kg i.e. 0.5 to 1 ml/10 kg IM) for short term anesthesia of 25 to 40 min. The ketamine dose can be adjusted, depending on the desired duration of surgery.

CAT
Combination with xylazine
Xylazine (0.5 to 1.1 mg/kg IM) with or without atropine is administered 20 min before ketamine (11 to 22 mg/kg IM i.e. 0.11 to 0.22 ml/kg IM).

Combination with medetomidine
Medetomidine (10 to 80 µg/kg IM) can be combined with ketamine (2.5 to 7.5 mg/kg IM i.e 0.025 to 0.075ml/kg IM). The dose of ketamine should be reduced as the dose of medetomidine increases.

HORSE
Combination with detomidine:
Detomidine 20 µg/kg IV, after 5 minutes ketamine 2.2 mg/kg fast IV (2.2 ml/100 kg IV)
Onset of action is gradual, taking approximately 1 minute to attain recumbency, with duration of anaesthetic effect lasting approximately 10 - 15 minutes.

Combination with xylazine:
Xylazine 1.1 mg/kg IV, followed by ketamine 2.2 mg/kg IV (2.2 ml/100 kg IV)
Onset of action is gradual, taking approximately 1 minute, with duration of anaesthetic effect being variable and lasting 10 - 30 minutes but usually less than 20 minutes.
After injection the horse lays down spontaneously without any further help. If a distinct muscle relaxation is required simultaneously, muscle relaxants can be administered to the recumbent animal, until the horse shows first symptoms of relaxation.

CATTLE

Combination with xylazine:

Adult cattle can be anesthetized for short periods with xylazine (0.1 to 0.2 mg/kg IV) followed by ketamine (2 mg/kg IV i.e. 2 ml/100kg IV). The lower dose of xylazine is used when cattle weigh more than 600 kg. Anesthesia lasts approximately 30 min but can be prolonged for 15 min with additional ketamine (0.75 to 1.25 mg/kg IV i.e. 0.75 to 1.25 ml/100kg IV).

SHEEP

Ketamine 7.5 to 22 mg/kg IV i.e. 0.75 to 2.2 ml/10kg IV depending on the sedative used.

GOAT

Ketamine 11 to 22 mg/kg IM i.e. 1.1 to 2.2 ml/10kg IM depending on the sedative used.

PIG

Combination with azaperone:

Ketamine 15 - 20 mg/kg IM (1.5 - 2 ml/10 kg) and 2 mg/kg azaperone IM.
In 4 – 5 month old pigs, following administration of 2 mg/kg azaperone and 20 mg/kg ketamine IM, the onset of anaesthesia took on average 29 minutes and duration of effect lasted about 27 minutes.

LABORATORY ANIMALS

Combination with xylazine

Rabbits: xylazine (5-10 mg/kg IM) + ketamine (35-50 mg/kg IM i.e. 0.35 to 0.50 ml/kg IM)
Rats: xylazine (5-10 mg/kg IP, IM) + ketamine (40-80 mg/kg IP, IM i.e. 0.4-0.8 ml/kg IP, IM)
Mice: xylazine (7.5-16 mg/kg IP) + ketamine (90-100 mg/kg IP i.e. 0.9 to 1.0 ml/kg IP)
Guinea pigs: xylazine (0.1 to 5 mg/kg IM) + ketamine (30-80 mg/kg IM i.e. 0.3 to 0.8 ml/kg IM)
Hamster: xylazine (5 to 10 mg/kg IP) + ketamine (50 to 200 mg/kg IP i.e. 0.5 to 2 ml/kg IP)

Dose for maintenance of anaesthesia:
When needed prolongation of effect is possible by repeated administration of an optionally reduced initial dose.

9. ADVICE ON CORRECT ADMINISTRATION

Ketamine can show large inter-individual variation in effect, and therefore dose rates administered should be tailored to the individual animal, dependent on factors such as age, condition, and the depth and duration of anaesthesia required.

The vial can be broached up to 20 times. The user should choose the most appropriate vial size according to the target species to be treated and the administration route.

10. WITHDRAWAL PERIOD(S)

Cattle, sheep, goats and horses:
Meat and offal : 1 day.
Milk : zero days.

Pigs :
Meat and offal : 1 day.

11. SPECIAL STORAGE PRECAUTIONS

Keep out of the sight and reach of children.
Store the vial in the original packaging in order to protect from light. Store the vial upright.
This veterinary medicinal product does not require any special temperature storage conditions.
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.
Shelf life after first opening the container: 28 days.

12. SPECIAL WARNING(S)

Special warnings for each target species:
For very painful and major surgical interventions, as well as for maintenance of anaesthesia, a combination with injectable or inhalation anaesthetics is necessary. As muscle relaxation required for surgical procedures cannot be achieved with ketamine alone, additional muscle-relaxants should be used concomitantly. For improvement of anaesthesia or prolongation of effect ketamine can be combined with α2-receptor- agonists, anaesthetics, neuroleptanalgesics, tranquilizers and inhalational anaesthetic agents.

Special precautions for use in animals:
A small proportion of animals have been reported to be unresponsive to ketamine as an anaesthetic agent at normal dosages. Use of premedicants should be followed by a suitable reduction in dosage.
.In the cat and dog, the eyes remain open and the pupils dilated. The eyes may be protected by covering with a damp gauze swab or using appropriate ointments.
Ketamine may exhibit pro-convulsant and anti-convulsant properties, and therefore should be used with care in patients with seizure disorders.
Ketamine may increase intracranial pressure and therefore, may not be suitable for patients with cerebrovascular insults.
When used in combination with other products, consult the contraindications and warnings that appear on the relevant data sheets.
The eyelid reflex stays intact.
Twitching, as well as excitation upon recovery, may be possible. It is important that both premedication and recovery should occur in quiet and calm surroundings. To ensure a smooth recovery appropriate analgesia and premedication should be administered, if indicated.

The concomitant use of other pre-anaesthetics or anaesthetics should be subject to a benefit/risk assessment, taking into account the composition of the used medicines and their doses and the nature of the intervention. The recommended doses of ketamine are likely to vary depending on the concomitant pre-anaesthetics and anaesthetics used.
The prior administration of an anticholinergic such as atropine or glycopyrrolate to prevent the occurrence of adverse effects, especially hypersalivation, may be considered after a benefit/risk assessment by the veterinarian.
Ketamine should be used with caution when pulmonary disease is present or suspected.
In small rodents cooling down should be prevented.

Special precautions to be taken by the person administering the veterinary medicinal product to animals:
This is a potent drug. Particular care should be taken to avoid accidental self-administration.
People with known hypersensitivity to ketamine or any of the excipients should avoid contact with the veterinary medicinal product.
Avoid contact with the skin and eyes. Wash any splashes from skin and eyes immediately with large amounts of water.
Adverse effects on the foetus cannot be excluded. Pregnant women should avoid handling the product.
In case of accidental self-injection or if symptoms occur after ocular/oral contact, seek medical advice immediately and show the package leaflet or the label to the physician, but DO NOT DRIVE.

Advice to the physician:
Do not leave patient unattended. Maintain airways and give symptomatic and supportive treatment.

Pregnancy and Lactation:
Ketamine passes the blood placenta barrier very well to enter the fetal blood circulation in which 75 to 100 % of the maternal blood levels can be reached. This partially anesthetizes neonates delivered by caesarean section.
The safety of the veterinary medicinal product has not been established during pregnancy and lactation. Use only accordingly to the benefit/risk assessment by the responsible veterinarian.

Interaction with other medicinal products and other forms of interaction:
Neuroleptics, tranquillisers. cimetidine and chloramphenicol potentiate ketamine anaesthesia (also see section “special warnings for each target species”).
Barbiturates, opiates and diazepam may prolong the recovery time.
Effects may be potentiated. A decrease of the dose of one or both agents may be necessary.

There is a possibility of an increased risk of cardiac arrhythmia when ketamine is used in combination with thiopental or halothane. Halothane prolongs the half-life of ketamine.
The simultaneous intravenous administration of a spasmolytic agent may provoke a collapse.

Theophylline, when given with ketamine, may provoke an increase of epileptic crises.

When detomidine is used together with ketamine, the recovery is slower than when ketamine is used alone.

Overdose (symptoms, emergency procedures, antidotes):
In case of overdose cardiac arrhythmia and respiratory depression up to paralysis may occur. If necessary, suitable artificial aids to maintain ventilation and cardiac output should be used until sufficient detoxification has taken place. Pharmacological cardiac stimulants are not recommended, unless no other supportive measures are available.

Incompatibilities:
Due to a chemical incompatibility, do not mix barbiturates or diazepam with ketamine in the same syringe.
The product must not be mixed with other veterinary medicinal products, with the exception of the infusion fluids 0.9% sodium chloride, Ringers solution and lactated Ringers solution.

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

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

14. DATE ON WHICH THE PACKAGE LEAFLET WAS LAST APPROVED

August 2019

15. OTHER INFORMATION

Clear type I glass vials containing 10 ml, 25 ml and 50 ml product closed with a bromobutyl rubber stopper and aluminium cap in a carton box.
Not all pack sizes may be marketed.

Approved: 02 August 2019