ANNEX I

SUMMARY OF PRODUCT CHARACTERISTICS

1. NAME OF THE VETERINARY MEDICINAL PRODUCT

KETOPROCEN 100 mg/ml SOLUTION FOR INJECTION for horses, cattle and pigs

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each ml contains:

Active substance:

Ketoprofen 100 mg

Excipients:

Benzyl alcohol (E1519) 10 mg

For the full list of excipients, see section 6.1.

3. PHARMACEUTICAL FORM

Solution for injection
Clear yellowish solution free from visible particles.

4. CLINICAL PARTICULARS

4.1 Target species

Horses, cattle and pigs.

4.2 Indications for use, specifying the target species

Horses:
- Alleviation of inflammation and pain associated with musculoskeletal disorders.
- Symptomatic treatment of visceral pain associated with colic. Postoperative pain and inflammation.

Cattle:
- Anti-inflammatory and analgesic treatment of diseases of musculoskeletal system.
- Reducing the pyrexia and distress associated with bacterial respiratory disease when used in connection with anti-microbial therapy as appropriate.
- Reducing mammary oedema.
- Anti-inflammatory, analgesic and anti-pyretic treatment in acute clinical mastitis signs of mastitis in conjunction with antimicrobial therapy.

Pigs:
- Reducing the pyrexia in respiratory diseases.
- Treatment of Postpartum Dysgalactia Syndrome, Mastitis Metritis Agalactia Syndrome.

4.3 Contraindications

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

Do not use in animals suffering from cardiac, hepatic or renal disease.

Do not use in animals where there is the possibility of gastro-intestinal ulceration or bleeding.

Do not use in animals where there is evidence of a blood dyscrasia or blood clotting disorders.

Do not administer other non-steroidal anti-inflammatory drugs (NSAIDs) concurrently or within 24 hours of each other.

Do not administer in association with corticoids, diuretics or anticoagulants.

4.4 Special warnings for each target species

None.

4.5 Special precautions for use

Special precautions for use in animals

The use of ketoprofen is not recommended in foals less than 15 days of age. Use in any animals less than 6 weeks of age or in aged animals may involve additional risk. If such use cannot be avoided animals may require a reduced dosage and careful management.

Avoid intra-arterial injection.

Do not exceed the stated dose or duration of treatment.

Avoid use in any dehydrated, hypovolaemic or hypotensive animals as there is a potential risk of increased renal toxicity. Sufficient water intake should be provided during treatment.

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

People with known hypersensitivity to the active substance and/or benzyl alcohol should avoid contact with the veterinary medicinal product.

In case of accidental self-injection, seek medical advice immediately and show the package leaflet or the label to the physician.

Avoid splashes on the skin and eyes. Irrigate thoroughly with water should this occur. If irritation persists seek medical advice.

Wash hands after use.

4.6 Adverse reactions (frequency and seriousness)

Irritation or gastro-intestinal ulceration may appear very rarely.

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).

4.7 Use during pregnancy or lactation

Laboratory studies in rats, mice and rabbits; and in cattle have not produced any evidence of a teratogenic or embryotoxic effects. Can be used during pregnancy and lactation in cattle.

The safety of the veterinary medicinal product has not been established during the fertility, pregnancy or foetal health in horses. Do not use in pregnant mares.

The safety of the veterinary medicinal product has not been established during pregnancy in sows. Use only accordingly to the benefit/risk assessment by the responsible veterinarian.

4.8 Interaction with other medicinal products and other forms of interaction

Do not administer with other non-steroidal anti-inflammatory drugs, glucocorticoids or with diuretics or anticoagulants.

Ketoprofen may be highly bound to plasma proteins and compete with other highly bound drugs which can lead to toxic effects.

Concurrent administration with nephrotoxic drugs should be avoided.

As ketoprofen may inhibit the platelet aggregation and provoke gastrointestinal ulcerations, it should not be use with other medicinal products with the same adverse reactions profile.

4.9 Amounts to be administered and administration route

Intramuscular or intravenous use.

Horses:

Intravenous injection.

- For use in musculoskeletal conditions, the dosage is 2.2 mg of ketoprofen per kg b.w., equivalent to 1 ml of product for each 45 kg of bodyweight, once daily for up 3 to 5 days.

- For use in colic, the dosage is 2.2 mg of ketoprofen per kg, i.e. 1 ml of product for each 45 kg of bodyweight, in a single injection.

Generally a single injection is sufficient: any additional injection should be preceded by a clinical re-assessment of the animal.

Cattle:

Intramuscular or intravenous injection.

Recommended dose: 3 mg ketoprofen/kg b.w., equivalent to 1ml of product for each 33 kg of bodyweight, once daily for up to 1 to 3 days.

Pigs:

Intramuscular injection.

Recommended dose: 3 mg/kg b.w., equivalent to 1 ml of product for each 33 kg of bodyweight, in a single dose.

For multiple vial entry, an aspirating needle or multi-dose syringe is recommended to avoid excessive broaching of the stopper. The cap may be safely punctured up to 30 times.

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

No clinical signs were observed when ketoprofen was administered to horses at 5 times the recommended dose for 15 days, or to cattle at 5 times the recommended dose for 5 days, or to pigs at 3 times the recommended dose for 3 days.

4.11 Withdrawal period(s)

Horses: Meat and offal: 4 days.

Milk: zero hours

Cattle: Meat and offal: 4 days

Milk: zero hours

Pigs: Meat and offal: 4 days.

5. PHARMACOLOGICAL PROPERTIES

Pharmacotherapeutic group: antiinflammatory and antirheumatic products, non-steroids. Propionic acid derivatives.

ATCvet code: QM01AE03.

5.1 Pharmacodynamic properties

Ketoprofen has anti-inflammatory, analgesic and antipyretic properties. Not all aspects of its mechanism of action are known. Effects are obtained partially by the inhibition of prostaglandin and leukotriene synthesis by ketoprofen, acting on cyclooxygenase and

lipoxygenase respectively. The formation of bradykinin is also inhibited. Ketoprofen inhibits thrombocyte aggregation. It is known that the (S)-enantiomer promotes the anti-inflammatory effect of ketoprofen.

5.2 Pharmacokinetic particulars

Ketoprofen is rapidly absorbed. Maximum plasma concentration is reached in less than one hour after parenteral administration. Bioavailability is almost complete. Ketoprofen binds strongly to plasma proteins, allowing their accumulation in exudates at the inflamed sites.

The duration of the action is longer than would be expected from its plasma half-life, which varies from one to four hours depending on the species.

Ketoprofen passes into synovial fluid and stays there at higher levels than in plasma, with a half-life two or three times longer than the plasma half-life.

Ketoprofen is metabolized in the liver and 90 per cent is excreted through urine.

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

- Benzyl alcohol (E1519)
- Arginine
- Citric acid monohydrate (for pH adjustment)
- 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

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

6.5 Nature and composition of immediate packaging

50 ml, 100 ml and 250 ml amber glass type II vials, with bromobutyl rubber stopper and aluminium cap with FLIP-OFF seal.

Package sizes:

- Cardboard box with 1 vial of 50 ml
- Cardboard box with 1 vial of 100 ml
- Cardboard box with 1 vial of 250 ml
- Cardboard box with 10 vials of 50 ml
- Cardboard box with 10 vials of 100 ml
- Cardboard box with 10 vials of 250 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 product should be disposed of in accordance with local requirements.

7. MARKETING AUTHORISATION HOLDER

CENAVISA, S.L.
Camí Pedra Estela s/n
43205 Reus (SPAIN)

8. MARKETING AUTHORISATION NUMBER(S)

9. DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

Date of first authorization:

10 DATE OF REVISION OF THE TEXT

PROHIBITION OF SALE, SUPPLY AND/OR USE