QUINAMIN INJECTION

(Quinapyramine Sulphate, Quinapyramine Chloride)

SUMMARY OF PRODUCT CHARACTERISTICS

1 NAME OF THE VETERINARY MEDICINAL PRODUCT

Quinamin Injection

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each Vial Contains:
Quinapyramine Sulphate ……..…1.500 gm
Quinapyramine Chloride ……..…1.000 gm

3. PHARMACEUTICAL FORM

Powder for Injection

4. CLINICAL INFORMATION

4.1. Target species

Camel, Cattle, Sheep & Goat,

4.2. Indications for use specifying the target species

Quinamin is indicated for the treatment and prophylaxis of Trypanosomiasis caused by species of Trypanosomes T. Evansi, in camels.

Used to treat trypanosomiasis, a parasitic disease that affects various animal species.

Treatment of trypanosomiasis caused by various Trypanosoma species, including T. evansi, T. vivax, T. congolense, and T. brucei.

4.3. Contraindications

Quinapyramine sulphate and chloride injection have several contraindications. They should not be administered to animals with known hypersensitivity to quinapyramine or any other component of the formulation. Secondly, caution is advised when using these drugs in pregnant or lactating animals as their safety in these conditions has not been fully established. Consultation with a veterinarian is crucial to assess the potential risks and benefits. Thirdly, animals with pre-existing kidney or liver disease should be closely monitored for adverse reactions if treated with these drugs. Lastly, concurrent use with other medications that may interact synergistically or antagonistically with quinapyramine should be avoided

4.4. Special warnings for each target species

Camels:
Sensitivity: Camels can be particularly sensitive to quinapyramine.
Dosage: Careful dosage adjustment is crucial to avoid adverse reactions.
Monitoring: Close monitoring for any signs of toxicity is essential.
Cattle:
Milk Withdrawal: Ensure sufficient milk withdrawal time before consumption to prevent drug residues in milk.
Meat Withdrawal: Observe meat withdrawal times to avoid drug residues in edible tissues.
Sheep and Goats:
Dosage: Adjust dosage carefully based on body weight to minimize the risk of adverse reactions.
Monitoring: Monitor for any signs of toxicity, such as anorexia, salivation, or tremors.

4.5. Special precautions for use

Special precautions for use in animals:

Use with caution in animals with pre-existing liver or kidney dysfunction.
No animal need be given more than 20 ml of Injection.
Injection should be administered subcutaneously in more than one place in debilitated animals.
In weak animals the suspension is further diluted to get 40 ml Instead of 20 ml and the dosage should be completed in 12 hourly installments.

Special precautions to be taken by the person administering the product to animals:

People with known hypersensitivity to the active substances should avoid contact with the veterinary medicinal product.
Avoid contact with eyes, skin, and mucous membranes.
Wash hands thoroughly after handling the product.
Keep out of reach of children.
In case of accidental self-injection, seek medical advice immediately and show the package leaflet or the label.

4.6. Adverse reactions (frequency and seriousness)

No Side Effect shown at normal dosage, however, Salivation, restlessness and tremor of muscles where injection has been administered may be observed in some susceptible animals that are excited or in weak animals at the time of receiving injection. The above reactions are transitory and pass off in a few hours by giving complete rest to the animal in a quiet place.

4.7. Use during pregnancy and lactation or lay

In the absence of specific studies in the target species, use only in accordance with the benefit/risk assessment by the responsible veterinarian.

4.8. Interaction with other veterinary medicinal products and other forms of interaction

Other trypanocides: Combining Quinamin Injection with other trypanocides may increase the risk of adverse reactions.
Drugs affecting liver or kidney function: Use with caution in animals receiving other medications that can affect liver or kidney function, as this may increase the risk of toxicity.

4.9. Dosage and administration route

The recommended dose is 0.025ml of Quinamin Injection per kg bodyweight. Do not exceed total dose of 15ml.

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

Data not available. Do not exceed recommended doses

4.11. With drawl period:

Meat: 21 days
Milk: 4 day.

5. PHARMACOLOGICAL PROPERTIES

Pharmacotherapeutic group: Antiprotozoal Group
ATCvet code: **QP51AA01**.

5.1. Pharmacodynamic properties

Quinapyramine sulphate acts as a trypanocidal agent, effectively targeting and eliminating trypanosomes, the protozoan parasites responsible for the disease trypanosomiasis (surra). Its primary mechanism of action involves disrupting the energy production processes within the trypanosome. Specifically, it interferes with crucial enzymes involved in the electron transport chain, a vital pathway for generating energy in the parasite. By inhibiting this energy production, quinapyramine sulphate ultimately kills the trypanosomes. While quinapyramine sulphate can exhibit some toxicity to mammalian cells, it demonstrates greater selectivity for trypanosomes, allowing it to target and eliminate the parasite without causing significant harm to the host animal.

Quinapyramine chloride, similarly to quinapyramine sulfate, primarily disrupts energy production within trypanosomes by interfering with their electron transport chain, leading to parasite death. A key characteristic of quinapyramine chloride is its slower absorption rate compared to quinapyramine sulfate, allowing for a depot effect at the injection site and a more sustained drug release. This prolonged action provides a longer-lasting prophylactic effect against re-infection. Like quinapyramine sulfate, quinapyramine chloride exhibits selective toxicity, targeting trypanosomes more effectively than mammalian cells, minimizing harm to the host animal.

5.2. Pharmacokinetic information

Quinapyramine Chloride is absorbed slowly from the injection site. This slow absorption is a key factor contributing to its prolonged therapeutic effect. A defining characteristic of quinapyramine chloride is its ability to form a depot at the injection site.
This depot acts as a reservoir, gradually releasing the drug into the bloodstream over an extended period. This sustained release provides a longer-lasting therapeutic effect and is particularly beneficial for its prophylactic action against trypanosome re-infection. Once absorbed, quinapyramine chloride distributes throughout the body. The extent of this distribution and its binding to plasma proteins likely influence its duration of action and effectiveness. While information on the specific metabolism and excretion pathways of quinapyramine chloride in animals is limited, it is generally believed to be metabolized in the liver and primarily eliminated through the kidneys in urine.

Quinapyramine Sulfate is rapidly absorbed from the injection site, contributing to its immediate therapeutic effect. Once absorbed, it is distributed throughout the body. While limited information exists on its specific metabolism and excretion, it is likely metabolized in the liver and primarily excreted through the kidneys. Due to its rapid absorption, quinapyramine sulfate generally exhibits a shorter duration of action compared to quinapyramine chloride

6. PHARMACEUTICAL INFORMATION

6.1 Incompatibilities

Incompatibilities of Quinapyramine Sulfate and Chloride may be limited in available veterinary

6.2. Shelf life

Shelf life of the veterinary medicinal product as packaged for sale: 2 years.
Shelf life after first opening the container: use immediately, do not store.

6.3. Special precautions for storage

Store below 30°C.
Protect from light.
Keep out of reach and sight of children

6.4. Nature and composition of primary conditioning

30ml clear glass vial with bromobutyl rubber stopper and aluminium flip off seal.

SPECIAL PRECAUTIONS FOR THE DISPOSAL OF WASTE MATERIALS
UNUSED MEDICINAL PRODUCTS OR WASTE MATERIALS

Any unused veterinary medicinal products or waste materials derived from such medicinal products should be disposed of in accordance with local requirements and placed in appropriate collection and disposal systems for unused or expired medicinal products.

7. MARKETING AUTHORISATION HOLDER

Nawan Laboratories (Pvt.) Ltd.
Plots No. 136-138, Sector-15,
Korangi Industrial Area, Karachi-74900, Pakistan.

8. MARKETING AUTHORISATION NUMBER

Reg. No.: 026441

9. DATE OF FIRST AUTHORISATION

Date of Reg.: 14-10-2000

10. DATE OF REVISION OF THE TEXT

05-06-2024

MANUFACTURED BY:

NAWAN LABORATORIES (PVT) LTD.
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