1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Quanifen (50 mg Praziquantel / 500 mg Fenbendazole) Tablets for Cats and Dogs

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each tablet contains: Active Substances: Praziquantel Fenbendazole

50.0 mg 500.0 mg

Qualitative composition of excipients and other constituents	
Sodium laurilsulfate	
Povidone 30	
Sodium Starch Glycolate	
Magnesium Stearate	

A round buff-coloured tablet with a quarter score line.

3. CLINICAL INFORMATION

3.1 Target Species

Dogs and cats.

3.2 Indications for use for each target species

For the treatment of mixed parasitic infections in dogs and cats caused by roundworms and tapeworms

of the following species:

<u>Ascarids</u>	Toxocara canis (adult)
	Toxocara cati (adult)
	Toxascaris leonina (adult)
<u>Hookworms</u>	Uncinaria stenocephala (adult)
	Ancylostoma caninum (adult)
<u>Whipworms</u>	Trichuris vulpis (adult)
<u>Tapeworms</u>	Echinococcus granulosus
	Echinococcus multilocularis
	Dipylidium caninum
	<i>Taenia</i> spp.
	Mesocestoides spp.

3.3 Contraindications

Do not use in cases of hypersensitivity to the active substances or to any of the excipients. Do not use in kittens less than 8 weeks of age.

3.4 Special warnings

Since one of the most common tapeworms of the dog and cat (*Dipylidium caninum*) is transmitted by a flea and has a very short pre-patent period, it is important to pay attention to flea control to reduce the incidence of tapeworm and the risk of re-infection.

3.5 Special precautions for use

Special precautions for safe use in the target species:

None.

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

Echinococcosis represents a hazard for humans. As Echinococcosis is a notifiable disease in the OIE, specific guidelines on the treatment and follow-up, and on the safeguard of persons, need to be obtained from the relevant competent authority.

Wash hands after handling tablets.

Special precautions for the protection of the environment:

Not applicable.

3.6 Adverse events:

Cats and dogs:

Very rare	Vomiting, Diarrhoea
(<1 animal / 10 000 animals treated, including	
isolated reports):	

Reporting adverse events is important. It allows continuous safety monitoring of a veterinary medicinal product. Reports should be sent, preferably via a veterinarian, to either the marketing authorisation holder or its local representative or the national competent authority via the national reporting system. See the package leaflet for respective contact details.

3.7 Use during pregnancy, lactation or lay

Pregnancy and lactation:

Do not exceed the stated dose when treating pregnant bitches. Do not use in pregnant bitches up to day 39 of pregnancy. The veterinary medicinal product can be used for the treatment of pregnant bitches during the last third of pregnancy. However, as teratogenic effects caused by the fenbendazole metabolite oxfendazole cannot be ruled out entirely in rare cases, use only according to the benefit/risk assessment by the responsible veterinarian.

Do not use in pregnant cats.

Can be used in lactating bitches and queens.

3.8 Interaction with other medicinal products and other forms of interaction

None known.

3.9 Administration routes and dosage

Oral use.

Administer orally either directly or mixed with food. Dietary measures or fasting are not necessary.

Dogs and cats: Single administration of this veterinary medicinal product at a dose of 5 mg praziquantel and 50 mg fenbendazole/kg bodyweight, equivalent to 1 tablet per 10 kg. For elimination of round worm infections, the treatment needs to be continued with an appropriate veterinary medicinal product containing fenbendazole at a dose rate of 50 mg/kg bw per day for two further consecutive days.

Dosing examples:-	
Small dogs and puppies over 6 months of age	
0.5 - 2.5 kg bodyweight	¹ ⁄4 tablet
>2.5 - 5 kg bodyweight	¹∕₂ tablet
6 - 10 kg bodyweight	1 tablet
Medium sized dogs	
11 - 15 kg bodyweight	1 ¹ / ₂ tablets
16 - 20 kg bodyweight	2 tablets
21 - 25 kg bodyweight	21/2 tablets
26 - 30 kg bodyweight	3 tablets
Large Dogs	
31 - 35 kg bodyweight	3 ¹ / ₂ tablets
36 - 40 kg bodyweight	4 tablets
Cats	
0.5-2.5 kg bodyweight	¹ ⁄4 tablet
> 2.5 -5 kg bodyweight	¹∕₂ tablet

Particularly under conditions of heavy challenge, the elimination of ascarids especially in puppies and kittens can be incomplete in individual animals so that a potential risk of infection to humans remains. A re-examination should therefore be conducted and on the basis of the results a re-treatment given if necessary, according to the judgement of the veterinarian.

3.10 Symptoms of overdose (and where applicable, emergency procedures and antidotes)

In studies with multiple overdose administration transient diarrhoea was observed. From 3 times the recommended dose, loose faeces in dogs and crying and restlessness in puppies were reported. At 5 times the recommended dose, excessive salivation was observed in dogs and puppies. Vomiting may also occur. Signs of overdose should be treated symptomatically. At 5 times the recommended dose, inappetence was observed in cats.

3.11 Special restrictions for use and special conditions for use, including restrictions on the use of antimicrobial and antiparasitic veterinary medicinal products in order to limit the risk of development of resistance

Not applicable.

3.12 Withdrawal Period(s)

Not applicable.

4. PHARMACOLOGICAL INFORMATION

4.1 ATCvet code: QP52AA51

4.2 Pharmacodynamics

Praziquantel causes spastic paralysis of the musculature of the parasites due to a membrane depolarisation of the muscle cells. It damages the normal function of the tegument, the glucose intake from the medium is inhibited and the production of lactate stimulated. The membrane is more permeable for glucose and more sensitive to the action of proteolytic enzymes.

At the molecular level the mechanism of action that produces the tetanic paralysis is still not fully understood. Several groups have suggested that praziquantel opens calcium channels in the tegument to bring about this effect. Praziquantel is rapidly absorbed and metabolised by the liver. It is rapidly excreted entirely as metabolites in the urine and bile. Disintegrated and partially digested fragments of tapeworm segments may occasionally be seen in the faeces.

Fenbendazole acts against parasites by disrupting the formation of microtubules by binding to tubulin in parasitic intestinal cells hence preventing the absorption of glucose, parasites are gradually starved to death. Fenbendazole displays preference for parasitic as opposed to mammalian tubulin. This appears to be due to the fact that the formation of the parasitic tubulin-fenbendazole complex is more favourable kinetically under physiological conditions than the mammalian complex. Fenbendazole may also inhibit energy production in helminths by inhibition of glucose uptake and glycogen breakdown.

4.3 Pharmacokinetics

PRAZIQUANTEL (PRZ)

After oral administration, PRZ is very rapidly and extensively (75-100%) absorbed. C_{max} is reached within 1 hour. PRZ rapidly enters tissues but there is no accumulation. It crosses the placenta in very small amounts, leading to very low concentrations in the foetus. About 80% of PRZ is protein bound in plasma. Serum concentration of non-metabolised praziquantel is low. There is an extensive first pass effect. Within 15 minutes of oral administration in dogs, 84% of the dose is metabolised.

Plasma T $\frac{1}{2}$ is about 1 hour. Most praziquantel and metabolites are eliminated via the kidneys. In dogs, < 0.3% is excreted unchanged. The remainder is excreted in bile and faeces. It is rapidly eliminated from blood and is undetectable after 24 hrs. Very small amounts are excreted in milk.

FENBENDAZOLE

Fenbendazole is poorly absorbed. Maximum plasma concentration is reached within about 20 hours and the parent drug is metabolised in the liver and eliminated within 48 hours. The main metabolite, oxfendazole, also possesses anthelmintic activity. Increasing the dose rate does not significantly increase plasma levels of fenbendazole and oxfendazole. Fenbendazole when administered with food demonstrates significantly higher bioavailability than when administered on an empty stomach. Excretion is mostly in the faeces with only 10% via urine

Following administration of this veterinary medicinal product with food in dogs, mean C_{max} for fenbendazole was 393 ng/ml, mean T_{max} was 14 hours, mean AUC was 5057 ng/ml/hr and mean half-life was 5 hours. Mean C_{max} of the active metabolite, oxfendazole was 332 ng/ml, mean T_{max} was 16 hours, mean AUC was 4480 ng/ml/hr and mean half-life of elimination was 5 hours. Praziquantel was rapidly absorbed, mean C_{max} was 935 ng/ml, mean T_{max} approximately one hour, mean AUC was 2765 ng/ml/hr and mean half-life was 3.5 hours.

Absorption of the tablets may be improved with food.

5. PHARMACEUTICAL PARTICULARS

5.1 Major incompatibilities

Not applicable.

5.2 Shelf-life

Shelf-life of the veterinary medicinal product as packaged for sale: 3 years.

5.3 Special precautions for storage

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

5.4 Nature and composition of immediate packaging

White high density polyethylene (HDPE) containers with a white polypropylene child resistant tamper evident cap. Strips: 30μ aluminium foil coated with 35 gsm extruded polythene. Blisters: Foil blisters (aluminium/aluminium). *Pack sizes:* Containers: 20, 24, 30, 50, 60, 96, 100 and 120 tablets. Strips and blisters: 2, 3, 4, 8, 10, 12, 20, 24, 30, 48, 50, 60, 96, 100 and 120 tablets.

Not all pack sizes may be marketed.

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

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 national collection systems applicable to the veterinary medicinal product concerned.

6. NAME OF THE MARKETING AUTHORISATION HOLDER

Chanelle Pharmaceuticals Manufacturing Ltd.

7. MARKETING AUTHORISATION NUMBER(S)

VPA10987/063/001

8. DATE OF FIRST AUTHORISATION

22/04/2005

9. DATE OF THE LAST REVISION OF THE SUMMARY OF THE PRODUCT CHARACTERISTICS

26/06/2025

10. CLASSIFICATION OF VETERINARY MEDICINAL PRODUCTS

Veterinary medicinal product not subject to prescription.

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