

1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Zantel Cat and Dog Tablets

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each tablet contains:

Active substances:

Praziquantel	50.0 mg
Fenbendazole	500.0 mg

Excipients:

Qualitative composition of excipients and other constituents
Sodium Lauryl Sulphate
Povidone 30
Sodium Starch Glycollate
Magnesium Stearate

A round buff-coloured tablet with a quarter score.

3. CLINICAL INFORMATION

3.1 Target Species:

Dogs and cats.

3.2 Indications for use for each target species

A broad spectrum anthelmintic for the treatment of mixed infections of gastrointestinal nematodes and cestodes in dogs and cats.

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

The veterinary medicinal product may also be used as an aid in the control of *Giardia* protozoa in dogs and *Aelurostrongylus abstrusus* lungworm infection in cats.

3.3 Contraindications

Do not use in kittens less than 8 weeks of age.

3.4 Special warnings for each target species

None.

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:

Wash hands after handling tablets.

Special precautions for the protection of the environment:

Not applicable.

3.6 Adverse events

None known.

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.

A veterinary surgeon should be consulted before treating pregnant bitches for roundworm.

Do not use in pregnant cats.

Can be used in lactating animals.

3.8 Interaction with other medicinal products and other forms of interaction

None known.

3.9 Administration routes and dosage

Oral use.

The veterinary medicinal product is administered orally either directly or mixed with a portion of meat or sausage or mixed with food. Dietary measures or fasting are not necessary. Absorption may be improved with food.

Routine treatment of adult dogs

The veterinary medicinal product should be administered as a single treatment at a dose rate of 5 mg praziquantel and 50 mg fenbendazole per kg bodyweight (equivalent to 1 tablet per 10 kg).

For example:-

Small dogs and puppies over 6 months of age

0.5 - 2.5 kg bodyweight	¼ tablet
>2.5 - 5 kg bodyweight	½ tablet
6 - 10 kg bodyweight	1 tablet

Medium sized dogs

11 - 15 kg bodyweight	1½ tablets
16 - 20 kg bodyweight	2 tablets
21 - 25 kg bodyweight	2½ tablets
26 - 30 kg bodyweight	3 tablets

Large Dogs

31 - 35 kg bodyweight	3½ tablets
36 - 40 kg bodyweight	4 tablets

Routine treatment of adult cats

The veterinary medicinal product should be administered as a single treatment at a dose rate of 5 mg praziquantel and 50 mg fenbendazole per kg bodyweight (equivalent to ½ tablet per 5 kg bodyweight).

For example:-

0.5 - 2.5 kg bodyweight	¼ tablet
>2.5 - 5 kg bodyweight	½ tablet

For routine control adult dogs and cats should be treated once every 3 months.

Weaned puppies & kittens under 6 months of age

The veterinary medicinal product should be administered at a dose rate of 5 mg praziquantel and 50 mg fenbendazole per kg bodyweight (equivalent to ½ tablet per 5 kg bodyweight). Treatment should be administered for three consecutive days.

Unweaned puppies and nursing bitches

For the control of Toxocara, it is important to worm young puppies very regularly with the veterinary medicinal product, at a dose rate of 5 mg praziquantel and 50 mg fenbendazole per kg bodyweight daily for three consecutive days (equivalent to ½ tablet per 5 kg daily for 3 days). This treatment regimen should be repeated at 2 weekly intervals from the age of 2 weeks for pups less than 12 weeks of age. It is then recommended that the veterinary medicinal product be administered at intervals of 3 months. Nursing bitches should be treated at the same time and as frequently as puppies up to 12 weeks of age. Thereafter the adult worming regime of once every three months is recommended.

Increased dosing for specific infections

For the treatment of clinical worm infestations in adult dogs administer the veterinary medicinal product at a dose rate of:-

5 mg praziquantel and 50 mg fenbendazole per kg bodyweight daily for two consecutive days (equivalent to 1 tablet per 10 kg daily for 2 days).

For the treatment of clinical worm infestations in adult cats and as an aid in the control of the lungworm *Aelurostrongylus abstrusus* in cats and Giardia protozoa in dogs administer the veterinary medicinal product at a dose rate of:-

5 mg praziquantel and 50 mg fenbendazole per kg bodyweight daily for three consecutive days (equivalent to ½ tablet per 5 kg daily for 3 days).

Note

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.

Praziquantel is effective against the tapeworm *Echinococcus multilocularis* in dogs and *Joyeuxiella pasqualei* in cats. These tapeworms do not occur in the UK and Ireland but are becoming more common in some European countries. As a precautionary measure it is recommended that all dogs and cats entering quarantine premises be treated with praziquantel.

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

Both fenbendazole and praziquantel are very well tolerated. After severe overdose occasional vomiting and transient diarrhoea may occur.

Inappetence may occur following high doses 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 PROPERTIES:

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

5. PHARMACEUTICAL PARTICULARS

5.1 Major incompatibilities

None known.

5.2 Shelf-life

Shelf life of 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

1. White high density polyethylene (HDPE) containers with a white polypropylene child resistant tamper evident cap.
2. 30µ aluminium foil coated with 35 gsm extruded polythene.
3. Foil blisters (aluminium/aluminium)

Pack sizes:

Containers: 20, 24, 30, 50, 60, 96, 100 and 120 tablets.

Blisters: 2, 3, 4, 8, 10, 12, 20, 24, 30, 48, 50, 60, 96, 100 and 120 tablets.

Strips: 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

VPA 10987/052/001

8. DATE OF FIRST AUTHORISATION

04/05/2001

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

10 July 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>).