

Summary of Product Characteristics

1 NAME OF THE VETERINARY MEDICINAL PRODUCT

Metrovis 100 mg tablets for dogs and cats

2 QUALITATIVE AND QUANTITATIVE COMPOSITION

1 tablet contains:

Active substance:

Metronidazole 100 mg

Excipient(s):

For the full list of excipients, see section 6.1.

3 PHARMACEUTICAL FORM

Tablet.

Beige coloured, round tablets with a cross-shaped break line on one side.

Tablets can be divided into 2 or 4 equal parts.

4 CLINICAL PARTICULARS

4.1 Target Species

Dogs and cats.

4.2 Indications for use, specifying the target species

Treatment of gastrointestinal tract infections caused by *Giardia* spp. and *Clostridia* spp. (i.e. *C. perfringens* or *C. difficile*).

Treatment of infections of the urogenital tract, oral cavity, throat, and skin caused by obligate anaerobic bacteria (e.g. *Clostridia* spp.) susceptible to metronidazole.

4.3 Contraindications

Do not use in case of hepatic disorders.

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

4.4 Special warnings for each target species

None.

4.5 Special precautions for use

Special precautions for use in animals

Due to the likely variability (time, geographical) in the occurrence of metronidazole resistant bacteria, bacteriological sampling and susceptibility testing are recommended.

Whenever possible, the product should only be used based on susceptibility testing.

Official, national and regional antimicrobial policies should be taken into account when the veterinary medicinal product is used.

In very rare cases, neurological signs may occur especially after prolonged treatment with metronidazole.

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

Metronidazole has confirmed mutagenic and genotoxic properties in laboratory animals as well as in humans. Metronidazole is a confirmed carcinogen in laboratory animals and has possible carcinogenic effects in humans. However, there is inadequate evidence in humans for the carcinogenicity of metronidazole.

Metronidazole may be harmful for the unborn child.

Impervious gloves should be worn during administration of the product to avoid skin contact with the product.

To avoid accidental ingestion, particularly by a child, unused tablets and part-tablets should be returned to the open blister space, inserted back into the outer packaging and kept in a safe place out of the sight and reach of children. In case of accidental ingestion, seek medical advice immediately and show the package leaflet or the label to the physician. Wash hands thoroughly after handling the tablets.

Metronidazole may cause hypersensitivity reactions. In case of known hypersensitivity to metronidazole, avoid contact with the veterinary medicinal product.

4.6 Adverse reactions (frequency and seriousness)

The following adverse reactions may occur after administration of metronidazole: vomiting, hepatotoxicity, neutropenia and neurological signs.

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, lactation or lay

Pregnancy:

Studies in laboratory animals have shown inconsistent results with regard to teratogenic/embryotoxic effects of metronidazole. Therefore, the use of this product during pregnancy is not recommended.

Lactation:

Metronidazole is excreted in milk and use during lactation is therefore not recommended.

4.8 Interaction with other medicinal products and other forms of interactions

Metronidazole may have an inhibitory effect on the degradation of other drugs in the liver, such as phenytoin, cyclosporine and warfarin.

Cimetidine may decrease the hepatic metabolism of metronidazole resulting in increased serum concentration of metronidazole.

Phenobarbital may increase hepatic metabolism of metronidazole resulting in decreased serum concentration of metronidazole.

4.9 Amounts to be administered and administration route

For oral use.

The recommended dose is 50 mg metronidazole per kg bodyweight per day, for 5-7 days. The daily dose may be split into two administrations per day (i.e. 25 mg/kg bodyweight twice daily).

To ensure administration of the correct dosage, bodyweight should be determined as accurately as possible. The following table is intended as a guide to dispensing the product at the recommended dose rate of either 50 mg per kg bodyweight, administered once daily or, preferably, administered twice daily in 25 mg per kg bodyweight.

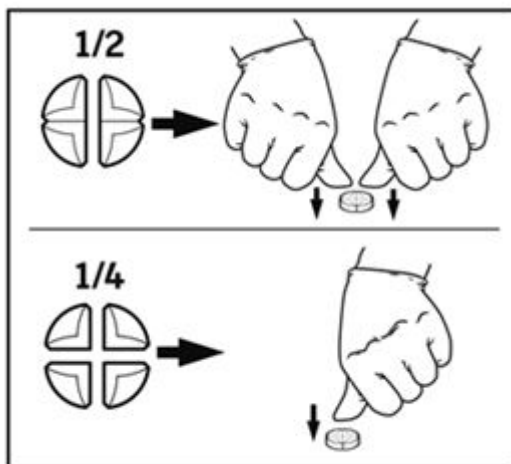
Bodyweight (kg)	Number of tablets		
	Twice daily		Once daily
	Morning	Evening	
0.5 kg	$\frac{1}{4}$	-	$\frac{1}{4}$
1 kg	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{2}$
2 kg	$\frac{1}{2}$	$\frac{1}{2}$	1
3 kg	$\frac{3}{4}$	$\frac{3}{4}$	1 $\frac{1}{2}$
4 kg	1	1	2
5 kg	1 $\frac{1}{4}$	1 $\frac{1}{4}$	2 $\frac{1}{2}$
6 kg	1 $\frac{1}{2}$	1 $\frac{1}{2}$	3
7 kg	1 $\frac{3}{4}$	1 $\frac{3}{4}$	3 $\frac{1}{2}$
8 kg	2	2	4

 = $\frac{1}{4}$ tablet
  = $\frac{1}{2}$ tablet
  = $\frac{3}{4}$ tablet
  = 1 tablet

Tablets can be divided into 2 or 4 equal parts to ensure accurate dosing. Place the tablet on a flat surface, with its scored side facing up and the convex (rounded) side facing the surface.

Halves: press down with your thumbs on both sides of the tablet.

Quarters: press down with your thumb in the middle of the tablet.



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

Adverse events are more likely to occur at doses and treatment durations in excess of the recommended treatment regimen. If neurologic signs occur, treatment should be discontinued, and the patient should be treated symptomatically.

4.11 Withdrawal period(s)

Not applicable.

5 PHARMACOLOGICAL or IMMUNOLOGICAL PROPERTIES

Pharmacotherapeutic group: Antiprotozoals against protozoal disease, (nitro-) imidazole derivatives

ATC code: QP51AA01

5.1 Pharmacodynamic properties

After metronidazole has penetrated the bacteria, the molecule is reduced by the susceptible bacteria (anaerobe). The metabolites that are created have a toxic effect on the bacteria through binding to the bacterial DNA. In general, metronidazole is bactericidal for susceptible bacteria in concentrations equal to or slightly higher than the minimum inhibiting concentration (MIC).

5.2 Pharmacokinetic particulars

Metronidazole is immediately and well absorbed after oral administration. The bioavailability of metronidazole is almost 100%. In dogs, a C_{max} of 79.5 µg/ml is observed following 1 hour after a single oral dose of 62 mg/kg bw. The terminal half-life in the plasma is about 5.3 hours (3.5 to 7.3 hours).

In cats, a C_{max} of 93.6 µg/ml is observed following 1.5 hours after a single oral dose of 83 mg/kg bw. The terminal half-life in the plasma is about 6.7 hours (5.2 to 8.3 hours).

Metronidazole penetrates well into the tissues and bodily fluids, such as saliva, milk, vaginal secretions and semen.

Metronidazole is primarily metabolised in the liver. Within 24 hours after oral administration, 35-65% of the administered dose (metronidazole and the metabolites thereof) is excreted in the urine.

6 PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Cellulose, microcrystalline
Sodium starch glycolate, type A
Hydroxypropylcellulose
Yeast (dried)
Beef Flavour
Magnesium stearate

6.2 Major incompatibilities

Not applicable.

6.3 Shelf-life

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

Shelf life of divided tablets: 3 days

6.4 Special precautions for storage

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

6.5 Nature and composition of immediate packaging

Aluminium - PVC/PE/PVDC blister
Cardboard box of 1, 2, 5, 10, 25 or 50 blisters of 10 tablets
Not all pack sizes may be marketed.

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

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

7 MARKETING AUTHORISATION HOLDER

LIVISTO Int'l, S.L.
Av. Universitat Autònoma, 29
08290 Cerdanyola des Vallès
Barcelona
E-08950
Spain

8 MARKETING AUTHORISATION NUMBER(S)

VPA10425/011/001

9 DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

Date of first authorisation: 13th August 2019

10 DATE OF REVISION OF THE TEXT

August 2020