# ANNEX I SUMMARY OF PRODUCT CHARACTERISTICS

#### 1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Metrovis 100 mg tablets for dogs and cats

#### 2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each tablet contains:

**Active substance:** 

Metronidazole 100 mg.

#### **Excipients:**

Qualitative composition of excipients and other constituents
Cellulose, microcrystalline
Sodium starch glycolate, type A
Hydroxypropylcellulose
Yeast (dried)
Beef flavour
Magnesium stearate

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

Tablets can be divided into 2 or 4 equal parts.

#### 3. CLINICAL INFORMATION

#### 3.1 Target species

Dogs, cats.

#### 3.2 Indications for use for each 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.

#### 3.3 Contraindications

Do not use in case of hepatic disorders.

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

#### 3.4 Special warnings

None.

#### 3.5 Special precautions for use

#### Special precautions for safe use in the target species:

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

Whenever possible, the veterinary medicinal 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.

Personal protective equipment consisting of impervious gloves should be worn when handling the veterinary medicinal 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.

#### Special precautions for the protection of the environment:

Not applicable.

#### 3.6 Adverse events

Dogs and cats:

Undetermined frequency (cannot be	Vomiting
estimated from the available data):	Hepatic toxicosis
	Neutropenia
	Neurological signs

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:

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

#### Lactation:

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

#### 3.8 Interaction with other medicinal products and other forms of interaction

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.

#### 3.9 Administration routes and dosage

Oral use.

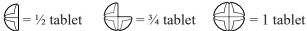
The recommended dose is 50 mg metronidazole per kg bodyweight per day, for 5-7 days. The daily dose may be split into two administrations per day (i.e. 25 mg/kg bodyweight twice daily).

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 veterinary medicinal 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.

	Number of tablets			
	Twice daily		0 1 1	
Bodyweight (kg)	Morning	Evening	Once daily	
0.5 kg	1/4	-	1/4	
1 kg	1/4	1/4	1/2	
2 kg	1/2	1/2	1	
3 kg	3/4	3/4	1 ½	
4 kg	1	1	2	
5 kg	1 1/4	1 1/4	2 ½	
6 kg	1 ½	1 ½	3	
7 kg	1 3/4	1 3/4	3 ½	
8 kg	2	2	4	

$$\sqrt{\phantom{a}}$$
 =  $\frac{1}{4}$  tablet

$$= \frac{1}{2}$$
 tables

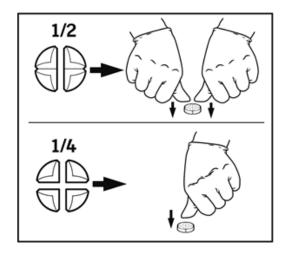


$$= 1 \text{ tablet}$$

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.

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



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

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.

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 periods

Not applicable.

#### 4. PHARMACOLOGICAL INFORMATION

#### 4.1 ATCvet code:

OJ01XD01

#### 4.2 Pharmacodynamics

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).

#### 4.3 Pharmacokinetics

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  $\mu$ g/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.

#### 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. Shelf life of divided tablets: 3 days.

#### 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

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.

# 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

Industrial Veterinaria, S.A.

#### 7. MARKETING AUTHORISATION NUMBER(S)

#### 8. DATE OF FIRST AUTHORISATION

Date of first authorisation: {DD/MM/YYYY}

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

{DD/MM/YYYY}

#### 10. CLASSIFICATION OF VETERINARY MEDICINAL PRODUCTS

Veterinary medicinal product subject to prescription.

Detailed information on this veterinary medicinal product is available in the <u>Union Product Database</u> ( <a href="https://medicines.health.europa.eu/veterinary">https://medicines.health.europa.eu/veterinary</a> ).

# ANNEX III LABELLING AND PACKAGE LEAFLET

A. LABELLING

PARTICULARS TO APPEAR ON THE OUTER PACKAGE  Cardboard box of 1, 2, 5, 10, 25 or 50 blisters of 10 tablets	
1. NAME OF THE VETERINARY MEDICINAL PRODUCT	
Metrovis 100 mg tablets	
2. STATEMENT OF ACTIVE SUBSTANCES	
Each tablet contains: Metronidazole 100 mg.	
3. PACKAGE SIZE	
10 tablets 20 tablets 50 tablets 100 tablets 250 tablets 500 tablets	
4. TARGET SPECIES	
Dogs, cats.	
5. INDICATIONS	
6. ROUTES OF ADMINISTRATION	
Oral use.	
7. WITHDRAWAL PERIODS	
8. EXPIRY DATE	-
Exp. {mm/yyyy} Shelf life of divided tablets: 3 days	
9. SPECIAL STORAGE PRECAUTIONS	

#### 10. THE WORDS "READ THE PACKAGE LEAFLET BEFORE USE"

Metronidazole may cause severe adverse reactions and has been associated with carcinogenicity. Avoid skin contact and accidental ingestion. Wear gloves. Store the veterinary medicinal product in a safe place. See package leaflet for full user warnings. Read the package leaflet before use.

#### 11. THE WORDS "FOR ANIMAL TREATMENT ONLY"

For animal treatment only.

#### 12. THE WORDS "KEEP OUT OF THE SIGHT AND REACH OF CHILDREN"

Keep out of the sight and reach of children.

#### 13. NAME OF THE MARKETING AUTHORISATION HOLDER

Industrial Veterinaria, S.A.

#### 14. MARKETING AUTHORISATION NUMBERS

#### 15. BATCH NUMBER

Lot {number}

# MINIMUM PARTICULARS TO APPEAR ON SMALL IMMEDIATE PACKAGING UNITS

**Blister containing 10 tablets** 

## 1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Metrovis



### 2. QUANTITATIVE PARTICULARS OF THE ACTIVE SUBSTANCES

100 mg

#### 3. BATCH NUMBER

Lot {number}

#### 4. EXPIRY DATE

Exp. {mm/yyyy}

**B. PACKAGE LEAFLET** 

#### PACKAGE LEAFLET

#### 1. Name of the veterinary medicinal product

Metrovis 100 mg tablets for dogs and cats

#### 2. Composition

Each tablet contains:

#### **Active substance:**

Metronidazole 100 mg

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

Tablets can be divided into 2 or 4 equal parts.

#### 3. Target species

Dogs, cats.



#### 4. Indications for use

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.

#### 5. Contraindications

Do not use in case of hepatic disorders.

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

#### 6. Special warnings

#### Special warnings:

None.

Special precautions for safe use in the target species:

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

Whenever possible, the veterinary medicinal 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.

Personal protective equipment consisting of impervious gloves should be worn when handling the veterinary medicinal 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.

#### Pregnancy:

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

#### Lactation:

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

#### <u>Interaction with other medicinal products and other forms of interaction:</u>

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.

#### Overdose:

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.

#### 7. Adverse events

Dogs and cats:

Undetermined frequency (cannot be estimated from the available data):

Vomiting

Hepatic toxicosis

Neutropenia

Neurological signs

Reporting adverse events is important. It allows continuous safety monitoring of a product. If you notice any side effects, even those not already listed in this package leaflet, or you think that the medicine has not worked, please contact, in the first instance, your veterinarian. You can also report

any adverse events to the marketing authorisation holder or its local representative using the contact details at the end of this leaflet, or via your national reporting system: {national system details}

#### 8. Dosage for each species, routes and method of administration

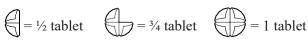
Oral use.

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 veterinary medicinal 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.

	Number of tablets			
	Twice daily		0	
Bodyweight (kg)	Morning	Evening	Once daily	
0.5 kg	1/4	-	1/4	
1 kg	1/4	1/4	1/2	
2 kg	1/2	1/2	1	
3 kg	3/4	3/4	1 ½	
4 kg	1	1	2	
5 kg	1 1/4	1 1/4	2 ½	
6 kg	1 ½	1 ½	3	
7 kg	1 3/4	1 3/4	3 ½	
8 kg	2	2	4	

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

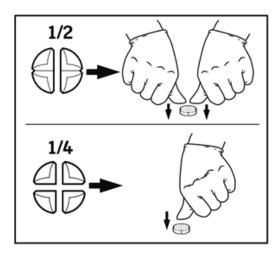


#### 9. Advice on correct administration

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.



#### 10. Withdrawal periods

Not applicable.

#### 11. Special storage precautions

Keep out of the sight and reach of children.

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

Do not use this veterinary medicinal product after the expiry date which is stated on the carton. Shelf life of divided tablets: 3 days.

### 12. Special precautions for disposal

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 applicable national collection systems. These measures should help to protect the environment.

Ask your veterinary surgeon or pharmacist how to dispose of medicines no longer required.

#### 13. Classification of veterinary medicinal products

Veterinary medicinal product subject to prescription.

#### 14. Marketing authorisation numbers and pack sizes

{National marketing authorisation numbers}

Cardboard box of 1, 2, 5, 10, 25 or 50 blisters of 10 tablets. Not all pack sizes may be marketed.

#### 15. Date on which the package leaflet was last revised

 $\{DD/MM/YYYY\}$ 

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

## 16. Contact details

Marketing authorisation holder and contact details to report suspected adverse events: Industrial Veterinaria, S.A. Esmeralda, 19 08950 Esplugues de Llobregat (Barcelona) Spain Tel.: +34 934 706 270
Manufacturers responsible for batch release: aniMedica GmbH Im Südfeld 9 48308 Senden-Bösensell Germany
aniMedica Herstellungs GmbH Im Südfeld 9 48308 Senden-Bösensell Germany
Industrial Veterinaria, S.A. Esmeralda, 19 08950 Esplugues de Llobregat (Barcelona) Spain
Local representatives and contact details to report suspected adverse events:
17. Other information