ANNEX I

SUMMARY OF PRODUCT CHARACTERISTICS

1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Cerenia 16 mg tablets for dogs
Cerenia 24 mg tablets for dogs
Cerenia 60 mg tablets for dogs
Cerenia 160 mg tablets for dogs

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Active substance:

Each tablet contains 16 mg, 24 mg, 60 mg or 160 mg maropitant as maropitant citrate monohydrate.

Excipients:

Qualitative composition of excipients and other constituents	**Quantitative composition if that information is essential for proper administration of the veterinary medicinal product**
Croscarmellose sodium	
Lactose monohydrate	
Magnesium stearate	
Microcrystalline cellulose	
Sunset Yellow (E110)	0.075% w/w

Pale orange tablet.
The tablets have a score line allowing the tablet to be halved, with the letters “MPT” and figures denoting the quantity of maropitant on one side, the reverse side is blank.

3. CLINICAL INFORMATION

3.1 Target species

Dogs.

3.2 Indications for use for each target species

- For the prevention of nausea induced by chemotherapy.
- For the prevention of vomiting induced by motion sickness.
- For the prevention and treatment of vomiting, in conjunction with Cerenia solution for injection and in combination with other supportive measures.

3.3 Contraindications

None.

3.4 Special warnings

Vomiting can be associated with serious, severely debilitating conditions including gastrointestinal obstructions; therefore, appropriate diagnostic evaluations should be employed.

Cerenia tablets have been shown to be effective in the treatment of emesis, however where the frequency of vomiting is high, orally administered Cerenia may not be absorbed before the next vomiting event occurs. It is therefore recommended to initiate the treatment of emesis with Cerenia solution for injection.

Good veterinary practice indicates that antiemetics should be used in conjunction with other veterinary and supportive measures, such as dietary control and fluid replacement therapy while addressing the underlying causes of the vomiting. The safety of maropitant during treatment beyond 5 days has not been explored in the target population (i.e. young dogs suffering from viral enteritis). In case treatment for a longer period than 5 days is regarded as necessary, careful monitoring of potential adverse events should be implemented.

3.5 Special precautions for use

Special precautions for safe use in the target species:

The safety of the veterinary medicinal product has not been established in dogs less than 16 weeks of age for the 8 mg/kg dose (motion sickness), and in dogs less than 8 weeks of age for the 2 mg/kg dose (vomiting) as well as in pregnant or lactating bitches. Use only according to the benefit-risk assessment by the responsible veterinarian.

Maropitant is metabolised in the liver and therefore should be used with caution in patients with hepatic disease. As maropitant is accumulated in the body during a 14-day treatment period due to metabolic saturation, careful monitoring of liver function in addition to any adverse events should be implemented during long term treatment.

Cerenia should be used with caution in animals suffering from or with predisposition for cardiac diseases as maropitant has affinity to Ca- and K-ion channels. Increases of approximately 10% in the QT interval of the ECG were observed in a study on healthy beagle dogs administered 8 mg/kg orally; however, such an increase is unlikely to be of clinical significance.

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

People with known hypersensitivity to maropitant should administer the veterinary medicinal product with caution.

Wash hands after use. In case of accidental ingestion seek medical advice immediately and show the package leaflet or the label to the physician.

Special precautions for the protection of the environment:

Not applicable.

3.6 Adverse events

Dogs:

Common (1 to 10 animals / 100 animals treated):	Vomiting[1]
Very rare (<1 animal / 10,000 animals treated, including isolated reports):	Neurological disorder (e.g. ataxia, convulsion, seizure, muscle tremor) Lethargy

[1] Observed pre-travel, usually within two hours after the administration of the 8 mg/kg dose.

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 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:

The safety of the veterinary medicinal product has not been established during pregnancy and lactation.
Use only according to the benefit-risk assessment by the responsible veterinarian.

3.8 Interaction with other medicinal products and other forms of interaction

Cerenia should not be used concomitantly with Ca-channel antagonists as maropitant has affinity to Ca-channels.
Maropitant is highly bound to plasma proteins and may compete with other highly bound drugs.

3.9 Administration routes and dosage

For oral use.

For motion sickness, a light meal or snack before dosing is recommended; prolonged fasting before administration should be avoided. However, Cerenia tablets should not be administered wrapped or encapsulated in food as this may delay dissolution of the tablet and consequently the onset of efficacy.

Dogs should be carefully observed following administration to ensure that each tablet is swallowed.

For the prevention of nausea induced by chemotherapy and treatment and prevention of vomiting (except motion sickness), (only for dogs 8 weeks of age or older).

To treat or prevent vomiting, Cerenia tablets should be administered once daily, at a dose of 2 mg maropitant per kg bodyweight, using the number of tablets given in the table below. Tablets are breakable along the score line on the tablet.

To prevent vomiting, tablets should be given more than 1 hour in advance. The duration of the effect is approximately 24 hours and, therefore, tablets can be given the night before administration of an agent that may cause emesis (e.g. chemotherapy).

Cerenia can be used to treat or prevent vomiting either as tablets or as solution for injection administered once daily. Cerenia solution for injection may be administered for up to five days and Cerenia tablets for up to fourteen days.

Prevention of nausea induced by chemotherapy Treatment and prevention of vomiting (except motion sickness)			
Dog body weight (kg)	**Number of tablets**		
	16 mg	**24 mg**	**60 mg**
3.0–4.0*	**½**		
4.1–8.0	**1**		
8.1–12.0		**1**	
12.1–24.0		**2**	
24.1–30.0			**1**
30.1–60.0			**2**

*** Correct dose for dogs of less than 3 kg cannot be accurately achieved.**

For prevention of vomiting induced by motion sickness, (only for dogs 16 weeks of age or older)

To prevent vomiting induced by motion sickness, Cerenia tablets should be administered once daily, at a dose of 8 mg maropitant per kg bodyweight, using the numbers of tablets given in the table below. Tablets are breakable along the score line on the tablet.

Tablets should be administered at least one hour before starting the journey. The anti-emetic effect persists for at least 12 hours, which for convenience may allow administration the night before early morning travel. Treatment may be repeated for a maximum of two consecutive days.

Prevention of motion sickness				
Dog body weight (kg)	Number of tablets			
	16 mg	24 mg	60 mg	160 mg
1.0–1.5		½		
1.6–2.0	1			
2.1–3.0		1		
3.1–4.0	2			
4.1–6.0		2		
6.1–7.5			1	
7.6–10.0				½
10.1–15.0			2	
15.1–20.0				1
20.1–30.0				1½
30.1–40.0				2
40.1–60.0				3

As the pharmacokinetic variation is large and maropitant accumulates in the body after once daily repeated administration, lower doses than recommended might be sufficient in some individuals and when repeating the dose.

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

Cerenia tablets were well tolerated when administered for 15 days at dosages up to 10 mg/kg bodyweight per day.

Clinical signs including vomiting on first administration, excess salivation and watery faeces have been observed when the product has been administered at doses in excess of 20 mg/kg.

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: QA04AD90

4.2 Pharmacodynamics

Vomiting is a complex process coordinated centrally by the emetic centre. This centre consists of several brainstem nuclei (area postrema, nucleus tractus solitarius, dorsal motor nucleus of the vagus nerve) that receive and integrate sensory stimuli from central and peripheral sources and chemical stimuli from the circulation and the cerebro-spinal fluid.

Maropitant is a neurokinin 1 (NK_1) receptor antagonist, which acts by inhibiting the binding of substance P, a neuropeptide of the tachykinin family. Substance P is found in significant concentrations in the nuclei comprising the emetic centre and is considered the key neurotransmitter involved in vomiting. By inhibiting the binding of substance P within the emetic centre, maropitant is effective against neural and humoral (central and peripheral) causes of vomiting. A variety of *in vitro* assays have demonstrated that maropitant binds selectively at the NK_1 receptor with dose-dependent functional antagonism of substance P activity. *In vivo* studies in dogs demonstrated the anti-emetic efficacy of maropitant against central and peripheral emetics including apomorphine, cisplatin and syrup of ipecac.

Maropitant is non-sedative and should not be used as a sedative in motion sickness.

Maropitant is effective against vomiting. Signs of nausea including excessive salivation and lethargy might remain during treatment.

4.3 Pharmacokinetics

The pharmacokinetic profile of maropitant when administered as a single oral dose of 2 mg/kg body weight to dogs was characterised by a maximum concentration (C_{max}) in plasma of approximately 81 ng/ml; this was achieved within 1.9 hours post-dosing (T_{max}). Peak concentrations were followed by a decline in systemic exposure with an apparent elimination half-life ($t_{0.5}$) of 4.03 hours.
At a dose of 8 mg/kg, C_{max} of 776 ng/ml was reached at 1.7 hours post-dosing. The elimination half-life at 8 mg/kg was 5.47 hours.

The inter-individual variation in kinetics may be large, up to 70 CV% for AUC.

During clinical studies maropitant plasma levels conferred efficacy from 1 hour after administration.

Estimates for the oral bioavailability of maropitant were 23.7% at 2 mg/kg and 37.0% at 8 mg/kg. The volume of distribution at steady-state (Vss) determined after intravenous administration at 1–2 mg/kg ranged from approximately 4.4 to 7.0 l/kg. Maropitant displays non-linear pharmacokinetics (AUC increases more than proportionally with increasing dose) when administered orally within the 1–16 mg/kg dose range.

Following repeated oral administration for five consecutive days at a daily dose of 2 mg/kg, accumulation was 151%. Following repeated oral administration for two consecutive days at a daily dose of 8 mg/kg, accumulation was 218%. Maropitant undergoes cytochrome P450 (CYP) metabolism in the liver. CYP2D15 and CYP3A12 were identified as the canine isoforms involved in the hepatic biotransformation of maropitant.

Renal clearance is a minor route of elimination, with less than 1% of an 8 mg/kg oral dose appearing in the urine as either maropitant or its major metabolite. Plasma protein binding of maropitant in dogs is more than 99%.

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 half tablets: 2 days.

5.3 Special precautions for storage

This veterinary medicinal product does not require any special storage conditions.
An unused half tablet should be returned to the opened blister and kept within the outer cardboard.

5.4 Nature and composition of immediate packaging

Cardboard box containing one aluminium-aluminium blister pack, each containing four tablets per pack.

Cerenia tablets are available in 16 mg, 24 mg, 60 mg and 160 mg strength.

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

Zoetis Belgium

7. MARKETING AUTHORISATION NUMBER(S)

EU/2/06/062/001-004

8. DATE OF FIRST AUTHORISATION

Date of first authorisation: 29/09/2006.

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

{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 Union Product Database (https://medicines.health.europa.eu/veterinary).

1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Cerenia 10 mg/ml solution for injection for dogs and cats

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

One ml of solution contains:

Active substance:

Maropitant as maropitant citrate monohydrate 10 mg

Excipients:

Qualitative composition of excipients and other constituents	**Quantitative composition if that information is essential for proper administration of the veterinary medicinal product**
Metacresol (as preservative)	3.3 mg
Sulphobutyl ether β-cyclodextrin (SBECD)	
Solvent:	
Water for injections	

A clear, colourless to light yellow solution.

3. CLINICAL INFORMATION

3.1 Target species

Dogs and cats.

3.2 Indications for use for each target species

Dogs
- For the treatment and prevention of nausea induced by chemotherapy.
- For the prevention of vomiting except that induced by motion sickness.
- For the treatment of vomiting, in combination with other supportive measures.
- For the prevention of perioperative nausea and vomiting and improvement in recovery from general anaesthesia after use of the μ-opiate receptor agonist morphine.

Cats
- For the prevention of vomiting and the reduction of nausea, except that induced by motion sickness.
- For the treatment of vomiting, in combination with other supportive measures.

3.3 Contraindications

None.

3.4 Special warnings

Vomiting can be associated with serious, severely debilitating conditions including gastrointestinal obstructions; therefore, appropriate diagnostic evaluations should be employed.

Good veterinary practice indicates that antiemetics should be used in conjunction with other veterinary and supportive measures such as dietary control and fluid replacement therapy while addressing the underlying causes of the vomiting.

The use of Cerenia solution for injection against vomiting due to motion sickness is not recommended.

Dogs
Although Cerenia has been demonstrated to be effective in both the treatment and prevention of emesis induced by chemotherapy, it was found more efficacious if used preventively. Therefore, it is recommended to administer the antiemetic prior to administration of the chemotherapeutic agent.

Cats
The efficacy of Cerenia in reduction of nausea was demonstrated in studies using a model (xylazine-induced nausea).

3.5 Special precautions for use

Special precautions for safe use in the target species:

The safety of the veterinary medicinal product has not been established in dogs less than 8 weeks of age, or in cats less than 16 weeks of age, and in pregnant or lactating dogs and cats. Use only according to the benefit-risk assessment by the responsible veterinarian.

Maropitant is metabolised in the liver and therefore should be used with caution in patients with hepatic disease. As maropitant is accumulated in the body during a 14-day treatment period due to metabolic saturation, careful monitoring of liver function and any adverse events should be implemented during long term treatment.

Cerenia should be used with caution in animals suffering from or with predisposition for cardiac diseases as maropitant has affinity to Ca- and K-ion channels. Increases of approximately 10% in the QT interval of the ECG were observed in a study on healthy beagle dogs administered 8 mg/kg orally; however, such an increase is unlikely to be of clinical significance.

Due to the frequent occurrence of transient pain during subcutaneous injection, appropriate animal restraining measures may have to be applied. Injecting the product at refrigerated temperature may reduce pain at injection.

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

People with known hypersensitivity to maropitant should administer the veterinary medicinal product with caution.

Wash hands after use. In case of accidental self-injection seek medical advice immediately and show the package leaflet or the label to the physician. In laboratory studies, maropitant has been shown to be a potential eye irritant. In the case of accidental eye exposure, flush the eyes with plenty of water and seek medical attention.

Special precautions for the protection of the environment:

Not applicable.

3.6 Adverse events

Dogs and cats:

Very common (>1 animal / 10 animals treated):	Injection site pain[1,2]
Very rare (<1 animal / 10,000 animals treated, including isolated reports):	Anaphylactic-type reaction (e.g. allergic oedema, urticaria, erythema, collapse, dyspnoea, pale mucous membranes) Lethargy Neurological disorder (e.g. ataxia, convulsion, seizure, muscle tremor)

[1] in cats - moderate to severe (in approximately one third of cats) when injected subcutaneously.
[2] in dogs - when injected subcutaneously.

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 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:

The safety of the veterinary medicinal product has not been established during pregnancy and lactation.
Use only according to the benefit-risk assessment by the responsible veterinarian.

3.8 Interaction with other medicinal products and other forms of interaction

Cerenia should not be used concomitantly with Ca-channel antagonists as maropitant has affinity to Ca-channels.
Maropitant is highly bound to plasma proteins and may compete with other highly bound medicines.

3.9 Administration routes and dosage

For subcutaneous or intravenous use in dogs and cats.

Cerenia solution for injection should be injected subcutaneously or intravenously, once daily, at a dose of 1 mg/kg bodyweight (1 ml/10 kg bodyweight) for up to 5 consecutive days. Intravenous administration of Cerenia should be given as a single bolus without mixing the product with any other fluids.

In dogs, Cerenia can be used to treat or prevent vomiting either as tablets or as solution for injection administered once daily. Cerenia solution for injection may be administered for up to five days and Cerenia tablets for up to fourteen days.

To prevent vomiting, Cerenia solution for injection should be administered more than 1 hour in advance. The effect duration is approximately 24 h and therefore treatment can be given the night before administration of an agent that may cause emesis e.g. chemotherapy.

As the pharmacokinetic variation is large and maropitant accumulates in the body after once daily repeated administration, lower doses than recommended might be sufficient in some individuals and when repeating the dose.

For administration by subcutaneous injection, see also "Special precautions for safe use in target species" (section 3.5).

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

Apart from transient reactions at the injection site following subcutaneous administration, Cerenia solution for injection was well tolerated in dogs and young cats injected daily with up to 5 mg/kg (5 times the recommended dose) for 15 consecutive days (3-times the recommended duration of administration). No data have been presented on overdoses in adult 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 periods

Not applicable.

4. PHARMACOLOGICAL INFORMATION

4.1 ATCvet code: QA04AD90

4.2 Pharmacodynamics

Vomiting is a complex process coordinated centrally by the emetic centre. This centre consists of several brainstem nuclei (area postrema, nucleus tractus solitarius, dorsal motor nucleus of the vagus nerve) that receive and integrate sensory stimuli from central and peripheral sources and chemical stimuli from the circulation and the cerebro-spinal fluid.

Maropitant is a neurokinin 1 (NK_1) receptor antagonist, which acts by inhibiting the binding of substance P, a neuropeptide of the tachykinin family. Substance P is found in significant concentrations in the nuclei comprising the emetic centre and is considered the key neurotransmitter involved in vomiting. By inhibiting the binding of substance P within the emetic centre, maropitant is effective against neural and humoral (central and peripheral) causes of vomiting.

A variety of *in vitro* assays have demonstrated that maropitant binds selectively at the NK_1 receptor with dose-dependent functional antagonism of substance P activity.

Maropitant is effective against vomiting. The anti-emetic efficacy of maropitant against central and peripheral emetics was demonstrated in experimental studies including apomorphine, cisplatin and syrup of ipecac (dogs) and xylazine (cats).
Signs of nausea in dogs including excessive salivation and lethargy might remain after treatment.

4.3 Pharmacokinetics

Dogs
The pharmacokinetic profile of maropitant when administered as a single subcutaneous dose of 1 mg/kg body weight to dogs was characterised by a maximum concentration (C_{max}) in plasma of approximately 92 ng/ml; this was achieved within 0.75 hours post-dosing (T_{max}). Peak concentrations were followed by a decline in systemic exposure with an apparent elimination half-life ($t_{1/2}$) of 8.84 hours. Following a single intravenous dose at 1 mg/kg the initial plasma concentration was 363 ng/ml. The volume of distribution at steady-state (Vss) was 9.3 l/kg and systemic clearance was 1.5 l/h/kg. The elimination $t_{1/2}$ following intravenous dosing was approximately 5.8 h.

During clinical studies maropitant plasma levels conferred efficacy from 1 hour after administration.

The bioavailability of maropitant after subcutaneous administration in dogs was 90.7%. Maropitant displays linear kinetics when administered subcutaneously within the 0.5–2 mg/kg dose range.

Following repeated subcutaneous administration of once-daily doses of 1 mg/kg bodyweight for five consecutive days, accumulation was 146%. Maropitant undergoes cytochrome P450 (CYP) metabolism in the liver. CYP2D15 and CYP3A12 were identified as the canine isoforms involved in the hepatic biotransformation of maropitant.

Renal clearance is a minor route of elimination, with less than 1% of a 1 mg/kg subcutaneous dose appearing in the urine as either maropitant or its major metabolite. Plasma protein binding of maropitant in dogs is more than 99%.

Cats
The pharmacokinetic profile of maropitant when administered as a single subcutaneous dose of 1 mg/kg body weight to cats was characterised by a maximum concentration (C_{max}) in plasma of approximately 165 ng/ml; this was achieved on average 0.32 hours (19 min) post-dosing (T_{max}). Peak concentrations were followed by a decline in systemic exposure with an apparent elimination half-life ($t_{1/2}$) of 16.8 hours. Following a single intravenous dose at 1 mg/kg the initial plasma concentration was 1040 ng/ml. The volume of distribution at steady-state (Vss) was 2.3 l/kg and systemic clearance was 0.51 l/h/kg. The elimination $t_{1/2}$ following intravenous dosing was approximately 4.9 h. There appears to be an age-related effect on the pharmacokinetics of maropitant in cats with kittens having higher clearance than adults.

During clinical studies maropitant plasma levels conferred efficacy from 1 hour after administration.

The bioavailability of maropitant after subcutaneous administration in cats was 91.3%. Maropitant displays linear kinetics when administered subcutaneously within the 0.25–3 mg/kg dose range.

Following repeated subcutaneous administration of once-daily doses of 1 mg/kg bodyweight for five consecutive days, accumulation was 250%. Maropitant undergoes cytochrome P450 (CYP) metabolism in the liver. CYP1A and CYP3A-related enzymes were identified as the feline isoforms involved in the hepatic biotransformation of maropitant.

Renal and faecal clearances are minor routes of elimination for maropitant, with less than 1% of a 1 mg/kg subcutaneous dose appearing in the urine or faeces as maropitant. For the major metabolite 10.4% of the maropitant dose was recovered in urine and 9.3% in faeces. Plasma protein binding of maropitant in cats was estimated to be 99.1%.

5. PHARMACEUTICAL PARTICULARS

5.1 Major incompatibilities

In the absence of compatibility studies, this veterinary medicinal product must not be mixed with other veterinary medicinal products in the same syringe.

5.2 Shelf life

Shelf life of the veterinary medicinal product as packaged for sale: 3 years.
Shelf life after first opening the immediate packaging: 60 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

Amber molded glass type 1 vial, 20 ml, chlorobutyl rubber stopper and aluminium overseal with flip-off button.
Each cardboard box contains 1 vial.

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

Zoetis Belgium

7. MARKETING AUTHORISATION NUMBER(S)

EU/2/06/062/005

8. DATE OF FIRST AUTHORISATION

Date of first authorisation: 29/09/2006.

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

{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 Union Product Database (https://medicines.health.europa.eu/veterinary).

ANNEX II

OTHER CONDITIONS AND REQUIREMENTS OF THE MARKETING AUTHORISATION

None.

ANNEX III

LABELLING AND PACKAGE LEAFLET

A. LABELLING

PARTICULARS TO APPEAR ON THE OUTER PACKAGE

Cardboard box / Tablets

1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Cerenia 16 mg tablets
Cerenia 24 mg tablets
Cerenia 60 mg tablets
Cerenia 160 mg tablets

2. STATEMENT OF ACTIVE SUBSTANCES

Each tablet contains 16 mg maropitant as maropitant citrate monohydrate.
Each tablet contains 24 mg maropitant as maropitant citrate monohydrate.
Each tablet contains 60 mg maropitant as maropitant citrate monohydrate.
Each tablet contains 160 mg maropitant as maropitant citrate monohydrate.

3. PACKAGE SIZE

4 tablets

4. TARGET SPECIES

Dogs

5. INDICATIONS

6. ROUTES OF ADMINISTRATION

Oral use.

7. WITHDRAWAL PERIODS

8. EXPIRY DATE

Exp. {mm/yyyy}

9. SPECIAL STORAGE PRECAUTIONS

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

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

Zoetis Belgium

14. MARKETING AUTHORISATION NUMBERS

EU/2/06/062/001 (16 mg tablets)
EU/2/06/062/002 (24 mg tablets)
EU/2/06/062/003 (60 mg tablets)
EU/2/06/062/004 (160 mg tablets)

15. BATCH NUMBER

Lot {number}

MINIMUM PARTICULARS TO APPEAR ON SMALL IMMEDIATE PACKAGING UNITS

BLISTER / Tablets

1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Cerenia

2. QUANTITATIVE PARTICULARS OF THE ACTIVE SUBSTANCES

16 mg tablets
24 mg tablets
60 mg tablets
160 mg tablets
maropitant

3. BATCH NUMBER

Lot {number}

4. EXPIRY DATE

Exp. {mm/yyyy}

PARTICULARS TO APPEAR ON THE OUTER PACKAGE

Cardboard box / Solution for injection

1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Cerenia 10 mg/ml solution for injection

2. STATEMENT OF ACTIVE SUBSTANCES

10 mg/ml maropitant as maropitant citrate monohydrate.

3. PACKAGE SIZE

20 ml

4. TARGET SPECIES

Dogs and cats.

5. INDICATIONS

6. ROUTES OF ADMINISTRATION

Subcutaneous or intravenous use.

7. WITHDRAWAL PERIODS

8. EXPIRY DATE

Exp. {mm/yyyy}
Once broached, use within 60 days.

9. SPECIAL STORAGE PRECAUTIONS

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

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

Zoetis Belgium

14. MARKETING AUTHORISATION NUMBERS

EU/2/06/062/005

15. BATCH NUMBER

Lot {number}

MINIMUM PARTICULARS TO APPEAR ON SMALL IMMEDIATE PACKAGING UNITS

Glass vial / Solution for injection

1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Cerenia

2. QUANTITATIVE PARTICULARS OF THE ACTIVE SUBSTANCES

10 mg/ml

3. BATCH NUMBER

Lot {number}

4. EXPIRY DATE

Exp. {mm/yyyy}
Once broached, use within 60 days.

B. PACKAGE LEAFLET

PACKAGE LEAFLET

1. Name of the veterinary medicinal product

Cerenia 16 mg tablets for dogs
Cerenia 24 mg tablets for dogs
Cerenia 60 mg tablets for dogs
Cerenia 160 mg tablets for dogs

2. Composition

Each tablet contains 16 mg, 24 mg, 60 mg or 160 mg maropitant as maropitant citrate monohydrate.
The tablets also contain 0.075% w/w Sunset Yellow (E110) as a colourant.
The tablets are pale orange and have a score line allowing the tablet to be halved, with the letters "MPT" and figures denoting the quantity of maropitant on one side, the reverse side is blank.

3. Target species

Dogs.

4. Indications for use

- For the prevention of nausea induced by chemotherapy.
- For the prevention of vomiting induced by motion sickness.
- For the prevention and treatment of vomiting, in conjunction with *Cerenia solution for injection* and in combination with other supportive measures.

5. Contraindications

None.

6. Special warnings

Special warnings:
Vomiting can be associated with serious, severely debilitating conditions and the cause should be investigated.
Products such as Cerenia should be used in conjunction with other supportive measures such as dietary control and fluid replacement therapy, as recommended by your veterinary surgeon. The safety of maropitant during treatment beyond 5 days has not been explored in the target population (i.e. young dogs suffering from viral enteritis). In case treatment for a longer period than 5 days is regarded as necessary, careful monitoring of potential adverse events should be implemented.

Special precautions for safe use in the target species:
The safety of Cerenia has not been established in dogs less than 16 weeks of age for the 8 mg/kg dose (motion sickness), and in dogs less than 8 weeks of age for the 2 mg/kg dose (vomiting) as well as in pregnant or lactating bitches. The responsible veterinarian should make a benefit-risk assessment before using Cerenia in dogs under 8 or 16 weeks of age, respectively, or in pregnant or lactating bitches.

Maropitant is metabolised in the liver and therefore should be used with caution in dogs with liver disease. As maropitant is accumulated in the body during a 14-day treatment period due to metabolic saturation, careful monitoring of liver function should be implemented during long term treatment.

Cerenia should be used with caution in animals suffering from or with predisposition for cardiac diseases as maropitant has affinity to Ca- and K-ion channels.

Special precautions to be taken by the person administering the veterinary medicinal product to animals:
People with known hypersensitivity to maropitant should administer the veterinary medicinal product with caution.
Wash hands after use. In case of accidental ingestion seek medical advice immediately and show the package leaflet or the label to the physician.

Pregnancy and lactation:
The safety of the veterinary medicinal product has not been established during pregnancy and lactation. Use only according to the benefit-risk assessment by the responsible veterinarian

Interaction with other medicinal products and other forms of interaction:
Cerenia should not be used concomitantly with Ca-channel antagonists as maropitant has affinity to Ca-channels.

Maropitant is highly bound to plasma proteins and may compete with other highly bound drugs.

Overdose:
Cerenia tablets were well tolerated when administered for 15 days at dosages up to 10 mg/kg bodyweight per day.

Clinical signs including vomiting on first administration, excess salivation and watery faeces have been observed when the product has been administered at doses in excess of 20 mg/kg.

7. Adverse events

Dogs:

Common (1 to 10 animals / 100 animals treated)
Vomiting[1]
Very rare (<1 animal / 10,000 animals treated, including isolated reports)
Neurological disorder (e.g. ataxia, convulsion, seizure, muscle tremor) Lethargy

[1]Observed pre-travel, usually within two hours of dosing.

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 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

For oral use.

For prevention of nausea induced by chemotherapy and treatment and prevention of vomiting (except motion sickness), only for dogs 8 weeks of age or older

To treat and/or prevent vomiting except motion sickness, Cerenia tablets should be administered once daily, at a dose of 2 mg maropitant per kg bodyweight, using the number of tablets given in the table below. Tablets are breakable along the score line on the tablet.

To prevent vomiting, tablets should be given more than 1 hour in advance. The duration of the effect is approximately 24 hours and, therefore, tablets can be given the night before administration of an agent that may cause emesis (e.g. chemotherapy).

Cerenia can be used to treat or prevent vomiting either as tablets or as solution for injection administered once daily. Cerenia solution for injection may be administered for up to five days and Cerenia tablets for up to fourteen days.

Prevention of nausea induced by chemotherapy Treatment and prevention of vomiting (except motion sickness)			
Dog body weight (kg)	**Number of tablets**		
	16 mg	**24 mg**	**60 mg**
3.0–4.0*	**½**		
4.1–8.0	**1**		
8.1–12.0		**1**	
12.1–24.0		**2**	
24.1–30.0			**1**
30.1–60.0			**2**

*** Correct dose for dogs of less than 3 kg cannot be accurately achieved.**

For prevention of vomiting induced by motion sickness, only for dogs 16 weeks of age or older
To prevent vomiting induced by motion sickness, Cerenia tablets should be administered once daily, at a dose of 8 mg maropitant per kg bodyweight, using the numbers of tablets given in the table below. Tablets are breakable along the score line on the tablet.

Tablets should be administered at least one hour before starting the journey. The anti-emetic effect persists for at least 12 hours, which for convenience may allow administration the night before early morning travel. Treatment may be repeated for a maximum of two consecutive days.
In some individual dogs and when repeating the treatment, lower doses than recommended might be sufficient.

Prevention of motion sickness only				
Dog body weight (kg)	**Number of tablets**			
	16 mg	**24 mg**	**60 mg**	**160 mg**
1.0-1.5		**½**		
1.6–2.0	**1**			
2.1–3.0		**1**		
3.1–4.0	**2**			
4.1–6.0		**2**		
6.1–7.5			**1**	
7.6–10.0				**½**
10.1–15.0			**2**	
15.1–20.0				**1**
20.1–30.0				**1½**
30.1–40.0				**2**
40.1–60.0				**3**

9. Advice on correct administration

To remove a tablet from the blister the following sequence should be carried out;
- Firstly, fold or cut along the perforation between each tablet as shown by the scissor symbol ✂
- Find the pull-back notch (or cut) as shown by the arrow symbol →
- Holding one side of the cut firmly, pull the other side towards the centre of the blister until the tablet is visible.
- Remove tablet from blister and administer as instructed.

Note: No attempt should be made to remove the tablet by pushing it through the blister backing as this will damage both the tablet and blister.

For motion sickness a light meal or snack before dosing is recommended, prolonged fasting before administration should be avoided. Cerenia tablets should not be administered wrapped or encapsulated in food as this may delay dissolution of the tablet and consequently the onset of the effect.

Dogs should be carefully observed following administration to ensure that each tablet is swallowed.

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.

Half-tablets should be stored for a maximum of two days after removal from the blister. Half-tablets should be returned to the opened blister and kept within the outer cardboard box.

Do not use this veterinary medicinal product after the expiry date which is stated on the carton and the blister after Exp. The expiry date refers to the last day of that month.

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 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

EU/2/06/062/001-004

Cerenia tablets are supplied in blister packs with four tablets per pack.

15. Date on which the package leaflet was last revised

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

16. Contact details

Marketing authorisation holder and contact details to report suspected adverse reactions:

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Manufacturer responsible for batch release:

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France

PACKAGE LEAFLET

1. Name of the veterinary medicinal product

Cerenia 10 mg/ml solution for injection for dogs and cats

2. Composition

The solution for injection contains 10 mg maropitant per ml as maropitant citrate monohydrate as a clear, colourless to light yellow solution.
It also contains metacresol (as preservative) 3.3 mg/ml.

3. Target species

Dogs and cats.

4. Indications for use

Dogs
- For the treatment and prevention of nausea induced by chemotherapy.
- For the prevention of vomiting except that induced by motion sickness.
- For the treatment of vomiting, in combination with other supportive measures.
- For the prevention of perioperative nausea and vomiting and improvement in recovery from general anaesthesia after use of the μ-opiate receptor agonist morphine.

Cats
- For the prevention of vomiting and the reduction of nausea, except that induced by motion sickness.
- For the treatment of vomiting, in combination with other supportive measures.

5. Contraindications

None.

6. Special warnings

Special warnings:
Vomiting can be associated with serious, severely debilitating conditions including gastrointestinal obstructions; therefore, appropriate diagnostic evaluations should be employed.

Good veterinary practice indicates that antiemetics should be used in conjunction with other veterinary and supportive measures such as dietary control and fluid replacement therapy while addressing the underlying causes of the vomiting.

The use of Cerenia solution for injection against vomiting due to motion sickness is not recommended.

Dogs:
Although Cerenia has been demonstrated to be effective in both the treatment and prevention of emesis induced by chemotherapy, it was found more efficacious if used preventively. Therefore, it is recommended to administer the antiemetic prior to administration of the chemotherapeutic agent.

Cats:
The efficacy of Cerenia in reduction of nausea was demonstrated in studies using a model (xylazine-induced nausea).

Special precautions for safe use in the target species:
The safety of Cerenia has not been established in dogs less than 8 weeks of age, or in cats less than 16 weeks of age, and in pregnant or lactating dogs and cats. The responsible veterinarian should make a benefit-risk assessment before using Cerenia in dogs less than 8 weeks of age, or in cats less than 16 weeks of age, or in pregnant or lactating bitches and cats.

Maropitant is metabolised in the liver and therefore should be used with caution in dogs and cats with liver disease.

Cerenia should be used with caution in animals suffering from or with predisposition for heart diseases as maropitant has affinity to Ca- and K-ion channels.

Special precautions to be taken by the person administering the veterinary medicinal product to animals:
People with known hypersensitivity to maropitant should administer the veterinary medicinal product with caution.
Wash hands after use. In case of accidental self-injection seek medical advice immediately and show the package leaflet or the label to the physician. Maropitant has been shown to be a potential eye irritant, and in the case of accidental eye exposure, flush the eyes with plenty of water and seek medical attention.

Pregnancy and lactation:
The safety of the veterinary medicinal product has not been established during pregnancy and lactation. Use only according to the benefit-risk assessment by the responsible veterinarian.

Interaction with other medicinal products and other forms of interaction:
Cerenia should not be used concomitantly with Ca-channel antagonists as maropitant has affinity to Ca-channels.

Maropitant is highly bound to plasma proteins and may compete with other highly bound medicines

Overdose:
Apart from transient reactions at the injection site following subcutaneous administration, Cerenia solution for injection was well tolerated in dogs and young cats injected daily with up to 5 mg/kg bodyweight (5 times the recommended dose) for 15 consecutive days (3-times the recommended duration of administration). No data have been presented on overdoses in adult cats.

Major incompatibilities:
Cerenia must not be mixed with other veterinary medicinal products in the same syringe as its compatibility with other products has not been tested.

7. Adverse events

Dogs and cats:

Very common (>1 animal / 10 animals treated):
Injection site pain[1,2]
Very rare (<1 animal / 10,000 animals treated, including isolated reports):

Anaphylactic-type reaction (e.g. allergic oedema, urticaria, erythema, collapse, dyspnoea, pale mucous membranes) Lethargy Neurological disorder (e.g. ataxia, convulsion, seizure, muscle tremor)

[1] In dogs, when injected subcutaneously.
[2] In cats, moderate to severe response can be observed in approximately one third of cats.

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 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

For subcutaneous or intravenous use in dogs and cats.

Cerenia solution for injection should be injected subcutaneously or intravenously, once daily, at a dose of 1 mg/kg bodyweight (1 ml/10 kg bodyweight). Treatment may be repeated for up to five consecutive days. Intravenous administration of Cerenia should be given as a single bolus without mixing the product with any other fluids.

In dogs, Cerenia solution for injection can be used to treat or prevent vomiting once daily for up to 5 days.

9. Advice on correct administration

To prevent vomiting, Cerenia solution for injection should be administered more than 1 hour in advance. The effect duration is approximately 24 h and therefore treatment can be given the night before administration of an agent that may cause emesis e.g. chemotherapy.

Due to the frequent occurrence of transient pain during subcutaneous injection, appropriate animal restraining measures may have to be applied. Injecting the product at refrigerated temperature may reduce pain at injection.

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 label of the vial after Exp. The expiry date refers to the last day of that month.
Shelf life after first opening the vial: 60 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 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

EU/2/06/062/005

Cerenia 10 mg/ml solution for injection for dogs and cats is available in 20 ml amber glass vials. Each cardboard box contains 1 vial.

15. Date on which the package leaflet was last revised

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

16. Contact details

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