# ANNEX I SUMMARY OF PRODUCT CHARACTERISTICS

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

Bravecto 112.5 mg chewable tablets for very small dogs (2–4.5 kg)

Bravecto 250 mg chewable tablets for small dogs (>4.5 –10 kg)

Bravecto 500 mg chewable tablets for medium-sized dogs (>10-20 kg)

Bravecto 1000 mg chewable tablets for large dogs (>20–40 kg)

Bravecto 1400 mg chewable tablets for very large dogs (>40–56 kg)

# 2. QUALITATIVE AND QUANTITATIVE COMPOSITION

#### **Active substance:**

Each chewable tablet contains:

Bravecto chewable tablets	Fluralaner (mg)
for very small dogs (2–4.5 kg)	112.5
for small dogs (>4.5–10 kg)	250
for medium-sized dogs (>10–20 kg)	500
for large dogs (>20–40 kg)	1,000
for very large dogs (>40–56 kg)	1,400

For the full list of excipients, see section 6.1.

#### 3. PHARMACEUTICAL FORM

Chewable tablet.

Light to dark brown tablet with a smooth or slightly rough surface and circular shape. Some marbling, speckles or both may be visible.

#### 4. CLINICAL PARTICULARS

# 4.1 Target species

Dogs

#### 4.2 Indications for use, specifying the target species

For the treatment of tick and flea infestations in dogs.

This veterinary medicinal product is a systemic insecticide and acaricide that provides:

- immediate and persistent flea (Ctenocephalides felis) killing activity for 12 weeks,
- immediate and persistent tick killing activity for 12 weeks for *Ixodes ricinus, Dermacentor reticulatus* and *D. variabilis*,
- immediate and persistent tick killing activity for 8 weeks for *Rhipicephalus sanguineus*.

Fleas and ticks must attach to the host and commence feeding in order to be exposed to the active substance. The onset of effect is within 8 hours of attachment for fleas (*C. felis*) and 12 hours of attachment for ticks (*I. ricinus*).

The product can be used as part of a treatment strategy for the control of flea allergy dermatitis (FAD).

#### 4.3 Contraindications

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

Parasites need to start feeding on the host to become exposed to fluralaner; therefore the risk of the transmission of parasite borne diseases cannot be excluded.

# 4.5 Special precautions for use

#### Special precautions for use in animals

Use with caution in dogs with pre-existing epilepsy.

In the absence of available data, the veterinary medicinal product should not be used on puppies less than 8 weeks old and /or dogs weighing less than 2 kg.

The product should not be administered at intervals shorter than 8 weeks as the safety for shorter intervals has not been tested.

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

Keep the product in the original packaging until use, in order to prevent children from getting direct access to the product.

Do not eat, drink or smoke while handling the product.

Wash hands thoroughly with soap and water immediately after use of the product.

# 4.6 Adverse reactions (frequency and seriousness)

Commonly observed adverse reactions in clinical trials (1.6% of treated dogs) were mild and transient gastrointestinal effects such as diarrhoea, vomiting, inappetence, and drooling.

Convulsions and lethargy have been reported very rarely in spontaneous (pharmacovigilance) reports.

The frequency of adverse reactions is defined using the following convention:

- very common (more than 1 in 10 animals displaying adverse reaction(s) during the course of one treatment)
- common (more than 1 but less than 10 animals in 100 animals)
- uncommon (more than 1 but less than 10 animals in 1,000 animals)
- rare (more than 1 but less than 10 animals in 10,000 animals)
- very rare (less than 1 animal in 10,000 animals, including isolated reports).

#### 4.7 Use during pregnancy, lactation or lay

The safety of the veterinary medicinal product in breeding, pregnant and lactating dogs has been demonstrated. Can be used in breeding, pregnant and lactating dogs.

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

None known.

Fluralaner is highly bound to plasma proteins and might compete with other highly bound drugs such as non-steroidal anti-inflammatory drugs (NSAIDs) and the cumarin derivative warfarin. Incubation of fluralaner in the presence of carprofen or warfarin in dog plasma at maximum expected plasma concentrations did not reduce the protein binding of fluralaner, carprofen or warfarin.

During clinical field testing, no interactions between Bravecto chewable tablets for dogs and routinely used veterinary medicinal products were observed.

#### 4.9 Amounts to be administered and administration route

For oral use.

Bravecto should be administered in accordance with the following table (corresponding to a dose of 25–56 mg fluralaner/kg bodyweight within one weight band):

Bodyweight	Strength and number of tablets to be administered				
of dog (kg)	Bravecto 112.5 mg	Bravecto 250 mg	Bravecto 500 mg	Bravecto 1000 mg	Bravecto 1400 mg
2-4.5	1				
>4.5-10		1			
>1020			1		
>20-40				1	
>4056					1

The chewable tablets should not be broken or divided.

For dogs above 56 kg bodyweight, use a combination of two tablets that most closely matches the bodyweight.

#### Method of administration:

Administer Bravecto chewable tablets at or around the time of feeding.

Bravecto is a chewable tablet and is well accepted by most dogs. If the tablet is not taken up voluntarily by the dog it can also be given with food or directly into the mouth. The dog should be observed during administration to confirm that the tablet is swallowed.

#### Treatment schedule:

For optimal control of flea infestation, the veterinary medicinal product should be administered at intervals of 12 weeks. For optimal control of tick infestation, the timing of retreatment depends on the tick species. See section 4.2.

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

No adverse reactions were observed following oral administration to puppies aged 8–9 weeks and weighing 2.0–3.6 kg treated with overdoses of up to 5 times the maximum recommended dose (56 mg, 168 mg and 280 mg fluralaner/kg bodyweight) on three occasions at shorter intervals than recommended (8-week intervals).

There were no findings on reproductive performance and no findings of concern on offspring viability when fluralaner was administered orally to Beagle dogs at overdoses of up to 3 times the maximum recommended dose (up to 168 mg/kg bodyweight of fluralaner).

The veterinary medicinal product was well tolerated in Collies with a deficient multidrug-resistance-protein 1 (MDR1 -/-) following single oral administration at 3 times the recommended dose (168 mg/kg bodyweight). No treatment-related clinical signs were observed.

#### 4.11 Withdrawal period

Not applicable.

#### 5. PHARMACOLOGICAL PROPERTIES

Pharmacotherapeutic group: Ectoparasiticides for systemic use.

ATCvet code: QP53BE02.

# 5.1 Pharmacodynamic properties

Fluralaner is an acaricide and insecticide. It is efficacious against ticks (*Ixodes* spp., *Dermacentor* spp. and *Rhipicephalus sanguineus*) and fleas (*Ctenocephalides* spp.) on the dog.

Fluralaner has a high potency against ticks and fleas by exposure via feeding, i.e. it is systemically active on target parasites.

Fluralaner is a potent inhibitor of parts of the arthropod nervous system by acting antagonistically on ligand-gated chloride channels (GABA-receptor and glutamate-receptor).

In molecular on-target studies on insect GABA receptors of flea and fly, fluralaner is not affected by dieldrin resistance.

In *in vitro* bio-assays, fluralaner is not affected by proven field resistances against amidines (tick), organophosphates (tick, mite), cyclodienes (tick, flea, fly), macrocyclic lactones (sea lice), phenylpyrazoles (tick, flea), benzophenyl ureas (tick), pyrethroids (tick, mite) and carbamates (mite).

The product contributes towards the control of the environmental flea populations in areas to which treated dogs have access.

Newly emerged fleas on a dog are killed before viable eggs are produced. An *in vitro* study also demonstrated that very low concentrations of fluralaner stop the production of viable eggs by fleas. The flea life cycle is broken due to the rapid onset of action and long lasting efficacy against adult fleas on the animal and the absence of viable egg production.

# 5.2 Pharmacokinetic particulars

Following oral administration, fluralaner is readily absorbed reaching maximum plasma concentrations within 1 day. Food enhances the absorption. Fluralaner is systemically distributed and reaches the highest concentrations in fat, followed by liver, kidney and muscle. The prolonged persistence and slow elimination from plasma ( $t_{1/2} = 12$  days) and the lack of extensive metabolism provide effective concentrations of fluralaner for the duration of the inter-dosing interval. Individual variation in  $C_{max}$  and  $t_{1/2}$  was observed. The major route of elimination is the excretion of unchanged fluralaner in faeces (~90% of the dose). Renal clearance is the minor route of elimination.

### 6. PHARMACEUTICAL PARTICULARS

#### 6.1 List of excipients

Pork liver flavour
Sucrose
Maize starch
Sodium lauryl sulfate
Disodium embonate monohydrate
Magnesium stearate
Aspartame
Glycerol
Soya-bean oil
Macrogol 3350

#### 6.2 Incompatibilities

None known.

#### 6.3 Shelf life

Shelf life of the veterinary medicinal product as packaged for sale: 2 years.

# 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

Cardboard box with 1 aluminium foil blister sealed with PET aluminium foil lid stock containing 1, 2 or 4 chewable tablets.

Not all pack sizes may be marketed.

# 6.6 Special precautions for the disposal of unused veterinary medicinal product 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

Intervet International B. V. Wim de Körverstraat 35 5831 AN Boxmeer The NETHERLANDS

# 8. MARKETING AUTHORISATION NUMBER(S)

EU/2/13/158/001-015

#### 9. DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

11/02/2014

### 10. DATE OF REVISION OF THE TEXT

{MM/YYYY}

Detailed information on this veterinary medicinal product is available on the website of the European Medicines Agency (http://www.ema.europa.eu/).

#### PROHIBITION OF SALE, SUPPLY AND/OR USE

Not applicable.

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

Bravecto 112.5 mg spot-on solution for very small dogs (2 - 4.5 kg)

Bravecto 250 mg spot-on solution for small dogs (>4.5 – 10 kg)

Bravecto 500 mg spot-on solution for medium-sized dogs (>10-20 kg)

Bravecto 1000 mg spot-on solution for large dogs (>20 - 40 kg)

Bravecto 1400 mg spot-on solution for very large dogs (>40 - 56 kg)

# 2. QUALITATIVE AND QUANTITATIVE COMPOSITION

#### **Active substance:**

Each ml contains 280 mg fluralaner.

Each pipette delivers:

	Pipette content (ml)	Fluralaner
	(1111)	(mg)
for very small dogs 2 – 4.5 kg	0.4	112.5
for small dogs >4.5 – 10 kg	0.89	250
for medium-sized dogs >10 – 20 kg	1.79	500
for large dogs >20 – 40 kg	3.57	1000
for very large dogs >40 – 56 kg	5.0	1400

For the full list of excipients, see section 6.1.

#### 3. PHARMACEUTICAL FORM

Spot-on-solution.

Clear colourless to yellow solution.

#### 4. CLINICAL PARTICULARS

#### 4.1 Target species

Dogs.

#### 4.2 Indications for use, specifying the target species

For the treatment of tick and flea infestations in dogs.

This veterinary medicinal product is a systemic insecticide and acaricide that provides:

- immediate and persistent flea (*Ctenocephalides felis* and *Ctenocephalides canis*) killing activity for 12 weeks, and
- immediate and persistent tick (*Ixodes ricinus, Rhipicephalus sanguineus* and *Dermacentor reticulatus*) killing activity for 12 weeks.

Fleas and ticks must attach to the host and commence feeding in order to be exposed to the active substance.

The product can be used as part of a treatment strategy for the control of flea allergy dermatitis (FAD).

#### 4.3 Contraindications

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

Parasites need to start feeding on the host to become exposed to fluralaner; therefore the risk of the transmission of parasite borne diseases cannot be excluded.

# 4.5 Special precautions for use

#### Special precautions for use in animals

Care should be taken to avoid contact with the eyes of the animal.

Do not use directly on skin lesions.

Do not wash or allow the dog to become immersed in water or swim in water courses within 3 days after treatment.

In the absence of available data, this veterinary medicinal product should not be used on puppies less than 8 weeks old and /or dogs weighing less than 2 kg.

The product should not be administered at intervals shorter than 8 weeks as the safety at shorter intervals has not been tested.

This product is for topical use and should not be administered orally.

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

This product is harmful after ingestion. Keep the product in the original packaging until use, in order to prevent children from getting direct access to the product. A used pipette should immediately be disposed of. In case of accidental ingestion, seek medical advice and show the package leaflet or the label to the physician.

This product and the wet skin of a recently treated animal may be slightly irritating to skin and/or eyes. Avoid contact with skin and/or eye, including hand-to-eye contact. Do not eat, drink or smoke while handling the product. Do not contact, or allow children to contact the application site until it is dry; it is therefore recommended to treat the animal in the evening. On the day of treatment, treated animals should not be permitted to sleep in the same bed as their owner, especially children. Wash hands and contacted skin thoroughly with soap and water immediately after use of the product. In case of contact with the eyes, immediately rinse thoroughly with water.

The product is highly flammable. Keep away from heat, sparks, open flame or other sources of ignition.

The active ingredient in the product is highly lipophilic and binds to skin and may also bind to surfaces after spillage of the product.

The following precautions are therefore recommended:

- Wear suitable gloves when handling or applying the product to dogs and cats.
- In case of spillage onto, for example table or floor surfaces, remove excess product using paper tissue and clean the area with detergent.

Do not allow treated animals to come into contact with untreated animals until the application site is dry.

#### 4.6 Adverse reactions (frequency and seriousness)

Commonly observed adverse reactions in clinical trials (1.2% of treated dogs) were mild and transient skin reactions such as erythema or alopecia at the application site.

The frequency of adverse reactions is defined using the following convention:

- very common (more than 1 in 10 animals displaying adverse reaction(s) during the course of one treatment)
- common (more than 1 but less than 10 animals in 100 animals)
- uncommon (more than 1 but less than 10 animals in 1,000 animals)

- rare (more than 1 but less than 10 animals in 10,000 animals)
- very rare (less than 1 animal in 10,000 animals, including isolated reports).

#### 4.7 Use during pregnancy, lactation or lay

The safety of the veterinary medicinal product in breeding, pregnant and lactating dogs has been demonstrated. Can be used in breeding, pregnant and lactating dogs.

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

None known.

Fluralaner is highly bound to plasma proteins and might compete with other highly bound medicinal products such as non-steroidal anti-inflammatory drugs (NSAIDs) and the coumarin derivative warfarin. Incubation of fluralaner in the presence of carprofen or warfarin in dog plasma at maximum expected plasma concentrations did not reduce the protein binding of fluralaner, carprofen or warfarin.

During laboratory and clinical field testing, no interactions between Bravecto spot-on solution for dogs and routinely used veterinary medicinal products were observed.

#### 4.9 Amounts to be administered and administration route

For spot-on use.

Bravecto should be administered in accordance with the following table (corresponding to a dose of 25-56 mg fluralaner/kg body weight):

Bodyweight	Strength and number of pipettes to be administered				
of dog (kg)	Bravecto 112.5 mg	Bravecto 250 mg	Bravecto 500 mg	Bravecto 1000 mg	Bravecto 1400 mg
2 - 4.5	1				
>4.5 - 10		1			
>10 - 20			1		
>20 - 40				1	
>40 - 56					1

For dogs above 56 kg body weight, use a combination of two pipettes that most closely matches the body weight.

#### Method of administration:

**Step 1:** Immediately before use, open the sachet and remove the pipette. The pipette should be held by the base or by the upper rigid portion below the cap in an upright position (tip up) for opening it.

The cap should be rotated clockwise or counter clockwise one full turn. The cap will stay on the pipette; it is not possible to remove it. The pipette is open and ready for application when the breaking of the seal is felt.









**Step 2**: The dog should be standing or lying with its back horizontal during application. Place the pipette tip vertically against the skin between the shoulder blades of the dog.

**Step 3:** Squeeze the pipette gently and apply the entire contents directly to the dog's skin in one (when volume is small) or several spots along the dog's dorsal line from the shoulder to the base of the tail. Avoid the application of more than 1 ml of solution at any one spot as it could cause some of the solution to run or drip off the dog.







#### Treatment schedule:

For optimal control of tick and flea infestation, the product should be administered at intervals of 12 weeks.

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

No adverse reactions were observed following topical administration to puppies aged 8–9 weeks and weighing 2.0–3.7 kg treated with overdoses of up to 5 times the maximum recommended dose (56 mg, 168 mg and 280 mg fluralaner/kg bodyweight) on three occasions at shorter intervals than recommended (8-week intervals).

There were no findings on reproductive performance and no findings of concern on offspring viability when fluralaner was administered orally to Beagle dogs at overdoses of up to 3 times the maximum recommended dose (up to 168 mg/kg bodyweight of fluralaner).

Fluralaner was well tolerated in Collies with a deficient multidrug-resistance-protein 1 (MDR1 -/-) following single oral administration at 3 times the maximum recommended dose (168 mg/kg bodyweight). No treatment-related clinical signs were observed.

# 4.11 Withdrawal period

Not applicable.

#### 5. PHARMACOLOGICAL PROPERTIES

Pharmacotherapeutic group: Ectoparasiticides for systemic use. ATCvet code: QP53B E02.

#### 5.1 Pharmacodynamic properties

Fluralaner is an acaricide and insecticide. It is efficacious against ticks (*Ixodes* spp., *Dermacentor* spp. and *Rhipicephalus sanguineus*) and fleas (*Ctenocephalides* spp.) on the dog.

The onset of efficacy is within 8 hours for fleas (*C. felis*) and 12 hours for ticks (*I. ricinus*).

Fluralaner has a high potency against ticks and fleas by exposure via feeding, i.e. it is systemically active on target parasites.

Fluralaner is a potent inhibitor of parts of the arthropod nervous system by acting antagonistically on ligand-gated chloride channels (GABA-receptor and glutamate-receptor).

In molecular on-target studies on insect GABA receptors of flea and fly, fluralaner is not affected by dieldrin resistance.

In *in vitro* bio-assays, fluralaner is not affected by proven field resistances against amidines (tick), organophosphates (tick, mite), cyclodienes (tick, flea, fly), macrocyclic lactones (sea lice), phenylpyrazoles (tick, flea), benzophenyl ureas (tick), pyrethroids (tick, mite) and carbamates (mite).

The product contributes towards the control of the environmental flea populations in areas to which treated dogs have access.

Newly emerged fleas on a dog are killed before viable eggs are produced. An *in vitro* study also demonstrated that very low concentrations of fluralaner stop the production of viable eggs by fleas. The flea life cycle is broken due to the rapid onset of action and long lasting efficacy against adult fleas on the animal and the absence of viable egg production.

#### 5.2 Pharmacokinetic particulars

Fluralaner is readily absorbed from the topical administration site into the hair, skin and subjacent tissues, from where it is slowly absorbed into the vascular system. A plateau is seen in plasma between 7 and 63 days post administration, after which concentrations decline slowly. The prolonged persistence and slow elimination from plasma ( $t_{1/2} = 21$  days) and the lack of extensive metabolism provide effective concentrations of fluralaner for the duration of the inter-dosing interval. Unchanged fluralaner is excreted in feces and to a very low extent in urine.

#### 6. PHARMACEUTICAL PARTICULARS

#### 6.1 List of excipients

Dimethylacetamide Glycofurol Diethyltoluamide Acetone

#### 6.2 Incompatibilities

None known.

#### 6.3 Shelf life

Shelf life of the veterinary medicinal product as packaged for sale: 2 years

#### 6.4. Special precautions for storage

This veterinary medicinal product does not require any special temperature storage conditions. The pipettes should be kept in the outer packaging to prevent solvent loss or moisture uptake. The sachets should only be opened immediately prior to use.

#### 6.5 Nature and composition of immediate packaging

Unit dose pipette made of laminated aluminium/polypropylene foil closed with an HDPE cap and packed in a laminated aluminium foil sachet. Each carton box contains 1 or 2 pipettes. Not all pack sizes may be marketed.

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

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

# 7. MARKETING AUTHORISATION HOLDER

Intervet International B. V. Wim de Körverstraat 35 5831 AN Boxmeer The Netherlands

# 8. MARKETING AUTHORISATION NUMBER(S)

EU/2/13/158/016-017 112.5 mg EU/2/13/158/020-021 250 mg EU/2/13/158/024-025 500 mg EU/2/13/158/028-029 1000 mg EU/2/13/158/030-031 1400 mg

#### 9. DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

Date of first authorisation: 11/02/2014

#### 10. DATE OF REVISION OF THE TEXT

 $\{MM/YYYY\}$ 

Detailed information on this veterinary medicinal product is available on the website of the European Medicines Agency <a href="http://www.ema.europa.eu/">http://www.ema.europa.eu/</a>.

# PROHIBITION OF SALE, SUPPLY AND/OR USE

Not applicable.

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

Bravecto 112.5 mg spot-on solution for small cats (1.2 - 2.8 kg)Bravecto 250 mg spot-on solution for medium-sized cats (>2.8 - 6.25 kg)Bravecto 500 mg spot-on solution for large cats (>6.25 - 12.5 kg)

#### 2. QUALITATIVE AND QUANTITATIVE COMPOSITION

#### **Active substance:**

Each ml contains 280 mg fluralaner.

Each pipette delivers:

	Pipette content (ml)	Fluralaner (mg)
for small cats 1.2 – 2.8 kg	0.4	112.5
for medium-sized cats >2.8 – 6.25 kg	0.89	250
for large cats >6.25 – 12.5 kg	1.79	500

For the full list of excipients, see section 6.1.

#### 3. PHARMACEUTICAL FORM

Spot-on-solution.

Clear colourless to yellow solution.

#### 4. CLINICAL PARTICULARS

#### 4.1 Target species

Cats.

#### 4.2 Indications for use, specifying the target species

For the treatment of tick and flea infestations in cats.

This veterinary medicinal product is a systemic insecticide and acaricide that provides immediate and persistent flea (*Ctenocephalides felis*) and tick (*Ixodes ricinus*) killing activity for 12 weeks.

Fleas and ticks must attach to the host and commence feeding in order to be exposed to the active substance.

The product can be used as part of a treatment strategy for the control of flea allergy dermatitis (FAD).

#### 4.3 Contraindications

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

Parasites need to start feeding on the host to become exposed to fluralaner; therefore the risk of the transmission of parasite borne diseases cannot be excluded.

# 4.5 Special precautions for use

#### Special precautions for use in animals

Care should be taken to avoid contact with the eyes of the animal. Do not use directly on skin lesions. In the absence of available data, this veterinary medicinal product should not be used on kitten less than 11 weeks old and /or cats weighing less than 1.2 kg.

The product should not be administered at intervals shorter than 8 weeks as the safety at shorter intervals has not been tested.

This product is for topical use and should not be administered orally.

Do not allow recently treated animals to groom each other.

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

This product is harmful after ingestion. Keep the product in the original packaging until use, in order to prevent children from getting direct access to the product. A used pipette should immediately be disposed of. In case of accidental ingestion, seek medical advice and show the package leaflet or the label to the physician.

This product and the wet skin of a recently treated animal may be slightly irritating to skin and/or eyes. Avoid contact with skin and/or eye, including hand-to-eye contact. Do not eat, drink or smoke while handling the product. Do not contact, or allow children to contact the application site until it is dry; it is therefore recommended to treat the animal in the evening. On the day of treatment, treated animals should not be permitted to sleep in the same bed as their owner, especially children. Wash hands and contacted skin thoroughly with soap and water immediately after use of the product. In case of contact with the eyes, immediately rinse thoroughly with water.

The product is highly flammable. Keep away from heat, sparks, open flame or other sources of ignition.

The active ingredient in the product is highly lipophilic and binds to skin and may also bind to surfaces after spillage of the product.

The following precautions are therefore recommended:

- Wear suitable gloves when handling or applying the product to dogs and cats.
- In case of spillage onto, for example table or floor surfaces, remove excess product using paper tissue and clean the area with detergent.

Do not allow treated animals to come into contact with untreated animals until the application site is dry.

#### 4.6 Adverse reactions (frequency and seriousness)

Commonly observed adverse reactions in clinical trials were mild and transient skin reactions at the application site (2.2% of treated cats), such as erythema and pruritus or alopecia.

The following other signs shortly after administration were observed: apathy/tremors/anorexia (0.9% of treated cats) or vomiting/hypersalivation (0.4% of treated cats).

The frequency of adverse reactions is defined using the following convention:

- very common (more than 1 in 10 animals displaying adverse reaction(s) during the course of one treatment)
- common (more than 1 but less than 10 animals in 100 animals)
- uncommon (more than 1 but less than 10 animals in 1,000 animals )
- rare (more than 1 but less than 10 animals in 10,000 animals)
- very rare (less than 1 animal in 10,000 animals, including isolated reports)

#### 4.7 Use during pregnancy, lactation or lay

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

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

None known.

Fluralaner is highly bound to plasma proteins and might compete with other highly bound medicinal products such as non-steroidal anti-inflammatory drugs (NSAIDs) and the coumarin derivative warfarin. Incubation of fluralaner in the presence of carprofen or warfarin in dog plasma at maximum expected plasma concentrations did not reduce the protein binding of fluralaner, carprofen or warfarin.

During laboratory and clinical field testing, no interactions between Bravecto spot-on solution for cats and routinely used veterinary medicinal products were observed.

#### 4.9 Amounts to be administered and administration route

For spot-on use.

Bravecto should be administered in accordance with the following table (corresponding to a dose of 40-94 mg fluralaner/kg body weight):

Bodyweight of cat	Strength and number of pipettes to be administered			
(kg)	Bravecto 112.5 mg Bravecto 250 mg Bravecto 500 mg			
1.2 - 2.8	1			
>2.8 - 6.25		1		
>6.25 – 12.5			1	

For cats above 12.5 kg body weight, use a combination of two pipettes that most closely matches the body weight.

#### Method of administration:

**Step 1:** Immediately before use, open the sachet and remove the pipette. The pipette should be held by the base or by the upper rigid portion below the cap in an upright position (tip up) for opening it.

The twist-and-use cap should be rotated clockwise or counter clockwise one full turn. The cap will stay on the pipette; it is not possible to remove it. The pipette is open and ready for application when the breaking of the seal is felt.









**Step 2**: The cat should be standing or lying with its back horizontal for easy application. Place the pipette tip on the base of the skull of the cat.

**Step 3:** Squeeze the pipette gently and apply the entire contents directly to the cat's skin. The product should be applied on cats up to 6.25 kg body weight in one spot at the base of the skull and in two spots on cats greater than 6.25 kg bodyweight.

#### Treatment schedule:

For optimal control of tick and flea infestation, the product should be administered at intervals of 12 weeks

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

No adverse reactions were observed following topical administration to kitten aged 11-13 weeks and weighing 1.2-1.5 kg treated with overdoses of up to 5 times the maximum recommended dose (93 mg, 279 mg and 465 mg fluralaner/kg body weight) on three occasions at shorter intervals than recommended (8-week intervals).

Oral uptake of the product at the maximum recommended dose of 93 mg fluralaner/kg body weight was well tolerated in cats, apart from some self-limiting salivation and coughing or vomiting immediately after administration.

#### 4.11 Withdrawal period

Not applicable.

#### 5. PHARMACOLOGICAL PROPERTIES

Pharmacotherapeutic group: Ectoparasiticides for systemic use

ATCvet code: QP53B E02

# 5.1 Pharmacodynamic properties

Fluralaner is an acaricide and insecticide. It is efficacious against ticks (*Ixodes* spp.) and fleas (*Ctenocephalides* spp.) on the cat.

The onset of efficacy is within 12 hours for fleas (C. felis) and within 48 hours for ticks (I. ricinus).

Fluralaner has a high potency against ticks and fleas by exposure via feeding, i.e. it is systemically active on target parasites.

Fluralaner is a potent inhibitor of parts of the arthropod nervous system by acting antagonistically on ligand-gated chloride channels (GABA-receptor and glutamate-receptor).

In molecular on-target studies on insect GABA receptors of flea and fly, fluralaner is not affected by dieldrin resistance.

In *in vitro* bio-assays, fluralaner is not affected by proven field resistances against amidines (tick), organophosphates (tick, mite), cyclodienes (tick, flea, fly), macrocyclic lactones (sea lice), phenylpyrazoles (tick, flea), benzophenyl ureas (tick), pyrethroids (tick, mite) and carbamates (mite).

The product contributes towards the control of the environmental flea populations in areas to which treated cats have access.

Newly emerged fleas on a cat are killed before viable eggs are produced. An *in vitro* study also demonstrated that very low concentrations of fluralaner stop the production of viable eggs by fleas. The flea life cycle is broken due to the rapid onset of action and long lasting efficacy against adult fleas on the animal and the absence of viable egg production.

#### 5.2 Pharmacokinetic particulars

Fluralaner is readily systemically absorbed from the topical administration site, reaching maximum concentrations in plasma between 3 and 21 days after administration. The prolonged persistence and slow elimination from plasma ( $t_{1/2} = 12$  days) and the lack of extensive metabolism provide effective concentrations of fluralaner for the duration of the inter-dosing interval. Unchanged fluralaner is excreted in feces and to a very low extent in urine.

#### 6. PHARMACEUTICAL PARTICULARS

#### 6.1 List of excipients

Dimethylacetamide

Glycofurol Diethyltoluamide Acetone

#### 6.2 Incompatibilities

None known.

#### 6.3 Shelf life

Shelf life of the veterinary medicinal product as packaged for sale: 2 years

#### 6.4. Special precautions for storage

This veterinary medicinal product does not require any special temperature storage conditions. The pipettes should be kept in the outer packaging to prevent solvent loss or moisture uptake. The sachets should only be opened immediately prior to use.

# 6.5 Nature and composition of immediate packaging

Unit dose pipette made of laminated aluminium/polypropylene foil closed with an HDPE cap and packed in a laminated aluminium foil sachet. Each carton box contains 1 or 2 pipettes. Not all pack sizes may be marketed.

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

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

# 7. MARKETING AUTHORISATION HOLDER

Intervet International B. V. Wim de Körverstraat 35 5831 AN Boxmeer The Netherlands

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

EU/2/13/158/018-019 112.5 mg EU/2/13/158/022-023 250 mg EU/2/13/158/026-037 500 mg

### 9. DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

Date of first authorisation: 11/02/2014

#### 10. DATE OF REVISION OF THE TEXT

 $\{MM/YYYY\}$ 

Detailed information on this veterinary medicinal product is available on the website of the European Medicines Agency <a href="http://www.ema.europa.eu/">http://www.ema.europa.eu/</a>.

# PROHIBITION OF SALE, SUPPLY AND/OR USE

Not applicable.

# ANNEX II

- A. MANUFACTURER RESPONSIBLE FOR BATCH RELEASE
- B. CONDITIONS OR RESTRICTIONS REGARDING SUPPLY AND USE
- C. STATEMENT OF THE MRLs
- D. OTHER CONDITIONS AND REQUIREMENTS OF THE MARKETING AUTHORISATION

#### A. MANUFACTURER RESPONSIBLE FOR BATCH RELEASE

Name and address of the manufacturer responsible for batch release

#### **Chewable tablets:**

Intervet GesmbH Siemensstrasse 107 1210 Vienna AUSTRIA

#### **Spot-on solution:**

Intervet UK Limited Walton Manor, Walton, Milton Keynes, Buckinghamshire, MK7 7AJ UNITED KINGDOM

#### B. CONDITIONS OR RESTRICTIONS REGARDING SUPPLY AND USE

Veterinary medicinal product subject to prescription.

#### C. STATEMENT OF THE MRLs

Not applicable.

# D. OTHER CONDITIONS AND REQUIREMENTS OF THE MARKETING AUTHORISATION

# Specific pharmacovigilance requirements:

The periodic safety update report (PSUR) cycle should be restarted for submission of 6 monthly reports (covering all authorised presentations of the product) for the next two years, followed by yearly reports for the subsequent two years and thereafter at 3 yearly intervals. The data lock point (DLP) for the next PSUR would be 31 August 2016.

# ANNEX III LABELLING AND PACKAGE LEAFLET

A. LABELLING

#### PARTICULARS TO APPEAR ON THE OUTER PACKAGE

#### Cardboard box

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

Bravecto 112.5 mg chewable tablets for very small dogs (2–4.5 kg)

Bravecto 250 mg chewable tablets for small dogs (>4.5 –10 kg)

Bravecto 500 mg chewable tablets for medium-sized dogs (>10 -20 kg)

Bravecto 1000 mg chewable tablets for large dogs (>20 –40 kg)

Bravecto 1400 mg chewable tablets for very large dogs (>40–56 kg)

Fluralaner

# 2. STATEMENT OF ACTIVE AND OTHER SUBSTANCES

Fluralaner 112.5 mg

Fluralaner 250 mg

Fluralaner 500 mg

Fluralaner 1000 mg

Fluralaner 1400 mg

#### 3. PHARMACEUTICAL FORM

Chewable tablet

#### 4. PACKAGE SIZE

1 chewable tablet

2 chewable tablets

4 chewable tablets

# 5. TARGET SPECIES

Dog

# 6. INDICATION(S)

# 7. METHOD AND ROUTE(S) OF ADMINISTRATION

Oral use.

Read the package leaflet before use.

# 8. WITHDRAWAL PERIOD

#### Not applicable.

# 9. SPECIAL WARNING(S), IF NECESSARY

#### 10. EXPIRY DATE

EXP: {month/year}

#### 11. SPECIAL STORAGE CONDITIONS

Read the package leaflet before use.

# 12. SPECIAL PRECAUTIONS FOR THE DISPOSAL OF UNUSED PRODUCTS OR WASTE MATERIALS, IF ANY

Read the package leaflet before use.

# 13. THE WORDS "FOR ANIMAL TREATMENT ONLY" AND CONDITIONS OR RESTRICTIONS REGARDING SUPPLY AND USE, if applicable

For animal treatment only. To be supplied only on veterinary prescription.

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

Keep out of the sight and reach of children.

#### 15. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER

Intervet International B. V. Wim de Körverstraat 35 5831 AN Boxmeer The NETHERLANDS

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

EU/2/13/158/001

EU/2/13/158/002

EU/2/13/158/003

EU/2/13/158/004

EU/2/13/158/005

EU/2/13/158/006

EU/2/13/158/007

EU/2/13/158/008

EU/2/13/158/009

EU/2/13/158/010

EU/2/13/158/011 EU/2/13/158/012 EU/2/13/158/013 EU/2/13/158/014 EU/2/13/158/015

# 17. MANUFACTURER'S BATCH NUMBER

Lot: {number}

# MINIMUM PARTICULARS TO APPEAR ON BLISTERS OR STRIPS Blister 1. NAME OF THE VETERINARY MEDICINAL PRODUCT Bravecto 112.5 mg (2–4.5 kg) Bravecto 250 mg (>4.5 –10 kg) Bravecto 500 mg (>10 -20 kg) Bravecto 1000 mg (>20 –40 kg) Bravecto 1400 mg (>40 –56 kg) Fluralaner 2. NAME OF THE MARKETING AUTHORISATION HOLDER Intervet International B.V. 3. **EXPIRY DATE** EXP: (MM/YYYY) 4. **BATCH NUMBER** Lot: {number}

5. THE WORDS "FOR ANIMAL TREATMENT ONLY"

For animal treatment only.

# PARTICULARS TO APPEAR ON THE OUTER PACKAGE **Carton Box** 1. NAME OF THE VETERINARY MEDICINAL PRODUCT Bravecto 112.5 mg spot-on solution for very small dogs (2 - 4.5 kg)Bravecto 250 mg spot-on solution for small dogs (>4.5-10 kg) Bravecto 500 mg spot-on solution for medium-sized dogs (>10-20 kg) Bravecto 1000 mg spot-on solution for large dogs (>20 - 40 kg) Bravecto 1400 mg spot-on solution for very large dogs (>40 - 56 kg) fluralaner 2. STATEMENT OF ACTIVE AND OTHER SUBSTANCES 112.5 mg fluralaner 250 mg fluralaner 500 mg fluralaner 1000 mg fluralaner 1400 mg fluralaner 3. PHARMACEUTICAL FORM Spot-on solution 4. **PACKAGE SIZE** 1 x 0.4 ml 1 x 0.89 ml 1 x 1.79 ml 1 x 3.57 ml 1 x 5.0 ml 2 x 0.4 ml 2 x 0.89 ml 2 x 1.79 ml 2 x 3.57 ml 2 x 5.0 ml **5. TARGET SPECIES**

# 6. INDICATIONS

Dogs

#### 7. METHOD AND ROUTE OF ADMINISTRATION

Spot-on use.

Read the package leaflet before use.

Instructions for use:







# 8. WITHDRAWAL PERIOD

Not applicable

# 9. SPECIAL WARNING(S), IF NECESSARY

Keep the product in the original packaging until use in order to prevent children from getting access to the product.

Read the package leaflet before use.

#### 10. EXPIRY DATE

EXP: {month/year}

# 11. SPECIAL STORAGE CONDITIONS

Read the package leaflet before use.

# 12. SPECIAL PRECAUTIONS FOR THE DISPOSAL OF UNUSED PRODUCTS OR WASTE MATERIALS, IF ANY

Read the package leaflet before use.

# 13. THE WORDS "FOR ANIMAL TREATMENT ONLY" AND CONDITIONS OR RESTRICTIONS REGARDING SUPPLY AND USE, IF APPLICABLE

For animal treatment only. To be supplied only on veterinary prescription.

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

Keep out of the sight and reach of children.

#### 15. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER

Intervet International B. V. Wim de Körverstraat 35 5831 AN Boxmeer The Netherlands

# 16. MARKETING AUTHORISATION NUMBER(S)

EU/2/13/158/016 (112.5 mg, 1 pipette) EU/2/13/158/017 (112.5 mg, 2 pipettes) EU/2/13/158/020 (250 mg, 1 pipette) EU/2/13/158/021 (250 mg, 2 pipettes) EU/2/13/158/024 (500 mg, 1 pipette) EU/2/13/158/025 (500 mg, 2 pipettes) EU/2/13/158/028 (1000 mg, 1 pipette) EU/2/13/158/029 (1000 mg, 2 pipettes) EU/2/13/158/030 (1400 mg, 1 pipette) EU/2/13/158/031 (1400 mg, 2 pipettes)

# 17. MANUFACTURER'S BATCH NUMBER

Lot: {number}

#### MINIMUM PARTICULARS TO APPEAR ON SMALL IMMEDIATE PACKAGING UNITS

**Sachet** 

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

Bravecto 112.5 mg spot-on solution for very small dogs (2-4.5 kg)

Bravecto 250 mg spot-on solution for small dogs (>4.5-10 kg)

Bravecto 500 mg spot-on solution for medium-sized dogs (>10 – 20 kg)

Bravecto 1000 mg spot-on solution for large dogs (>20 - 40 kg)

Bravecto 1400 mg spot-on solution for very large dogs (>40 – 56 kg)

fluralaner

# 2. QUANTITY OF THE ACTIVE SUBSTANCE

112.5 mg fluralaner

250 mg fluralaner

500 mg fluralaner

1000 mg fluralaner

1400 mg fluralaner

# 3. CONTENTS BY WEIGHT, BY VOLUME OR BY NUMBER OF DOSES

0.4 ml

0.89 ml

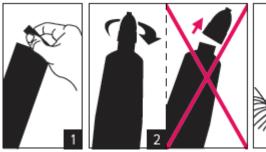
1.79 ml

3.57 ml

5.0 ml

#### 4. ROUTE OF ADMINISTRATION

#### For spot-on use



1. Open sachet. 2. Rotate cap (cap cannot be removed). 3. Apply to skin. Keep the pipette in the sachet until use.

#### 5. WITHDRAWAL PERIOD

Not applicable

# 6. BATCH NUMBER

Lot:{number}

# 7. EXPIRY DATE

EXP: {month/year}

# 8. THE WORDS "FOR ANIMAL TREATMENT ONLY"

For animal treatment only.

PARTICULARS TO APPEAR ON THE OUTER PACKAGE
Carton Box
1. NAME OF THE VETERINARY MEDICINAL PRODUCT
Bravecto 112.5 mg spot-on solution for small cats (1.2 – 2.8 kg) Bravecto 250 mg spot-on solution for medium-sized cats (>2.8 – 6.25 kg) Bravecto 500 mg spot-on solution for large cats (>6.25 – 12.5 kg) fluralaner
2. STATEMENT OF ACTIVE AND OTHER SUBSTANCES
112.5 mg fluralaner 250 mg fluralaner 500 mg fluralaner
3. PHARMACEUTICAL FORM
Spot-on solution
4. PACKAGE SIZE
1 x 0.4 ml 1 x 0.89 ml 1 x 1.79 ml 2 x 0.4 ml 2 x 0.89 ml 2 x 1.79 ml
5. TARGET SPECIES
Cats
6. INDICATIONS
7. METHOD AND ROUTE OF ADMINISTRATION
Spot-on use. Read the package leaflet before use. Instructions for use:



#### 8. WITHDRAWAL PERIOD

Not applicable

# 9. SPECIAL WARNING(S), IF NECESSARY

Keep the product in the original packaging until use in order to prevent children from getting access to the product.

Read the package leaflet before use.

#### 10. EXPIRY DATE

EXP: {month/year}

# 11. SPECIAL STORAGE CONDITIONS

Read the package leaflet before use.

# 12. SPECIAL PRECAUTIONS FOR THE DISPOSAL OF UNUSED PRODUCTS OR WASTE MATERIALS, IF ANY

Read the package leaflet before use.

# 13. THE WORDS "FOR ANIMAL TREATMENT ONLY" AND CONDITIONS OR RESTRICTIONS REGARDING SUPPLY AND USE, IF APPLICABLE

For animal treatment only. To be supplied only on veterinary prescription.

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

Keep out of the sight and reach of children.

#### 15. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER

Intervet International B. V. Wim de Körverstraat 35

# 16. MARKETING AUTHORISATION NUMBER(S)

EU/2/13/158/018 (112.5 mg, 1 pipette) EU/2/13/158/019 (112.5 mg, 2 pipettes) EU/2/13/158/022 (250 mg, 1 pipette) EU/2/13/158/023 (250 mg, 2 pipettes) EU/2/13/158/026 (500 mg, 1 pipette) EU/2/13/158/027 (500 mg, 2 pipettes)

# 17. MANUFACTURER'S BATCH NUMBER

Lot: {number}

#### MINIMUM PARTICULARS TO APPEAR ON SMALL IMMEDIATE PACKAGING UNITS

**Sachet** 

# 1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Bravecto 112.5 mg spot-on solution for small cats (1.2-2.8 kg)Bravecto 250 mg spot-on solution for medium-sized cats (>2.8-6.25 kg)Bravecto 500 mg spot-on solution for large cats (>6.25-12.5 kg)fluralaner

# 2. QUANTITY OF THE ACTIVE SUBSTANCE(S)

112.5 mg fluralaner 250 mg fluralaner 500 mg fluralaner

# 3. CONTENTS BY WEIGHT, BY VOLUME OR BY NUMBER OF DOSES

0.4 ml 0.89 ml 1.79 ml

#### 4. ROUTE OF ADMINISTRATION

#### For spot-on use







1. Open sachet. 2. Rotate cap (cap cannot be removed). 3. Apply to skin. Keep the pipette in the sachet until use.

# 5. WITHDRAWAL PERIOD

Not applicable

#### 6. BATCH NUMBER

Lot:{number}

# 7. EXPIRY DATE

EXP: {month/year}

# 8. THE WORDS "FOR ANIMAL TREATMENT ONLY"

For animal treatment only.

**B. PACKAGE LEAFLET** 

# PACKAGE LEAFLET FOR Bravecto chewable tablets for dogs

# 1. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER AND OF THE MANUFACTURING AUTHORISATION HOLDER RESPONSIBLE FOR BATCH RELEASE, IF DIFFERENT

## Marketing authorisation holder:

Intervet International B. V. Wim de Körverstraat 35 5831 AN Boxmeer The NETHERLANDS

# Manufacturer responsible for batch release:

Intervet GesmbH Siemensstrasse 107 1210 Vienna AUSTRIA

## 2. NAME OF THE VETERINARY MEDICINAL PRODUCT

Bravecto 112.5 mg chewable tablets for very small dogs (2–4.5 kg)

Bravecto 250 mg chewable tablets for small dogs (>4.5–10 kg)

Bravecto 500 mg chewable tablets for medium-sized dogs (>10-20 kg)

Bravecto 1000 mg chewable tablets for large dogs (>20–40 kg)

Bravecto 1400 mg chewable tablets for very large dogs (>40–56 kg)

Fluralaner

# 3. STATEMENT OF THE ACTIVE SUBSTANCE AND OTHER INGREDIENTS

Each chewable tablet of Bravecto contains:

Bravecto chewable tablets	Fluralaner (mg)
for very small dogs (2–4.5 kg)	112.5
for small dogs (>4.5–10 kg)	250
for medium-sized dogs (>10 –20 kg)	500
for large dogs (>20 –40 kg)	1,000
for very large dogs (>40 –56 kg)	1,400

Light to dark brown tablet with a smooth or slightly rough surface and circular shape. Some marbling, speckles or both may be visible.

# 4. INDICATIONS

For the treatment of tick and flea infestations on dogs.

This veterinary medicinal product is a systemic insecticide and acaricide that provides

- immediate and persistent flea (Ctenocephalides felis) killing activity for 12 weeks,
- immediate and persistent tick killing activity for 12 weeks for *Ixodes ricinus, Dermacentor reticulatus* and *D. variabilis*;
- immediate and persistent tick killing activity for 8 weeks for *Rhipicephalus sanguineus*.

Fleas and ticks must attach to the host and commence feeding in order to be exposed to the active substance. The onset of effect is within 8 hours of attachment for fleas (*C. felis*) and 12 hours of attachment for ticks (*I. ricinus*).

The product can be used as part of a treatment strategy for the control of flea allergy dermatitis (FAD).

### 5. CONTRAINDICATIONS

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

### 6. ADVERSE REACTIONS

Commonly observed adverse reactions in clinical trials (1.6% of treated dogs) were mild and transient gastrointestinal effects such as diarrhoea, vomiting, inappetence, and drooling.

Convulsions and lethargy have been reported very rarely in spontaneous (pharmacovigilance) reports.

The frequency of adverse reactions is defined using the following convention:

- very common (more than 1 in 10 animals displaying adverse reaction(s) during the course of one treatment)
- common (more than 1 but less than 10 animals in 100 animals)
- uncommon (more than 1 but less than 10 animals in 1,000 animals)
- rare (more than 1 but less than 10 animals in 10,000 animals)
- very rare (less than 1 animal in 10,000 animals, including isolated reports).

If you notice any serious effects or other effects not mentioned in this package leaflet, please inform your veterinary surgeon.

#### 7. TARGET SPECIES

Dogs

#### 8. DOSAGE FOR EACH SPECIES, ROUTE AND METHOD OF ADMINISTRATION

For oral use.

Bravecto chewable tablets should be administered in accordance with the following table (corresponding to a dose of 25–56 mg fluralaner/kg bodyweight within one weight band):

Bodyweight	Strength and number of tablets to be administered				
of dog (kg)	Bravecto	Bravecto	Bravecto	Bravecto	Bravecto
or dog (kg)	112.5 mg	250 mg	500 mg	1000 mg	1400 mg
2-4.5	1				
>4.5 - 10		1			
>10 - 20			1		
>20 -40				1	
>40 - 56					1

For dogs above 56 kg bodyweight, use a combination of two tablets that most closely matches the bodyweight.

#### 9. ADVICE ON CORRECT ADMINISTRATION

The chewable tablets should not be broken or divided.

Administer Bravecto chewable tablets at or around the time of feeding.

Bravecto is a chewable tablet and is well accepted by most dogs. If the tablet is not taken up voluntarily by the dog it can also be given with food or directly into the mouth. The dog should be observed during administration to confirm that the tablet is swallowed.

### <u>Treatment schedule:</u>

For optimal control of flea infestation, the veterinary medicinal product should be administered at intervals of 12 weeks. For optimal control of tick infestation, the timing of retreatment depends on the tick species. See section 4.

#### 10. WITHDRAWAL PERIOD

Not applicable.

#### 11. SPECIAL STORAGE PRECAUTIONS

Keep out of the sight and reach of children.

Do not use this veterinary medicinal product after the expiry date stated on the blister after EXP. The expiry date refers to the last day of that month.

### 12. SPECIAL WARNINGS

#### Special warnings for each target species:

Parasites need to start feeding on the host to become exposed to fluralaner; therefore the risk of the transmission of parasite borne diseases cannot be excluded.

### Special precautions for use in animals:

Use with caution in dogs with pre-existing epilepsy.

In the absence of available data, the product should not be used on puppies less than 8 weeks old and /or dogs weighing less than 2 kg.

The product should not be administered at intervals shorter than 8 weeks as the safety for shorter intervals has not been tested.

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

Keep the product in the original packaging until use, in order to prevent children from getting direct access to the product.

Do not eat, drink or smoke while handling the product.

Wash hands thoroughly with soap and water immediately after use of the product.

# Pregnancy, lactation and fertility:

The veterinary medicinal product can be used in breeding, pregnant and lactating dogs.

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

None known.

Fluralaner is highly bound to plasma proteins and might compete with other highly bound drugs such as non-steroidal anti-inflammatory drugs (NSAIDs) and the cumarin derivative warfarin. Incubation of fluralaner in the presence of carprofen or warfarin in dog plasma at maximum expected plasma concentrations did not reduce the protein binding of fluralaner, carprofen or warfarin.

During clinical field testing, no interactions between Bravecto chewable tablets for dogs and routinely used veterinary medicinal products were observed.

## Overdose (symptoms, emergency procedures, antidotes):

Safety was demonstrated in breeding, pregnant and lactating animals treated with overdoses of up to 3 times the maximum recommended dose.

Safety was demonstrated in puppies aged 8–9 weeks and weighing 2.0–3.6 kg treated with overdoses of up to 5 times the maximum recommended dose on three occasions at shorter intervals than recommended (8-week intervals).

The veterinary medicinal product was well tolerated in collies with a deficient multidrug-resistance-protein 1 (MDR1 -/-) following single oral administration at 3 times the recommended dose.

# **Incompatibilities**:

None known.

# 13. SPECIAL PRECAUTIONS FOR THE DISPOSAL OF UNUSED PRODUCT OR WASTE MATERIALS, IF ANY

Medicines should not be disposed of via wastewater or household waste.

Ask your veterinary surgeon how to dispose of medicines no longer required. These measures should help to protect the environment.

# 14. DATE ON WHICH THE PACKAGE LEAFLET WAS LAST APPROVED

Detailed information on this product is available on the website of the European Medicines Agency (http://www.ema.europa.eu/).

#### 15. OTHER INFORMATION

The product contributes towards the control of environmental flea populations in areas to which treated dogs have access.

Cardboard box with 1 aluminium foil blister sealed with PET aluminium foil lid stock containing 1, 2 or 4 chewable tablets.

Not all pack sizes may be marketed.

#### **PACKAGE LEAFLET FOR:**

Bravecto 112.5 mg spot-on solution for very small dogs (2 – 4.5 kg)
Bravecto 250 mg spot-on solution for small dogs (>4.5 – 10 kg)
Bravecto 500 mg spot-on solution for medium-sized dogs (>10 – 20 kg)
Bravecto 1000 mg spot-on solution for large dogs (>20 – 40 kg)
Bravecto 1400 mg spot-on solution for very large dogs (>40 – 56 kg)

# 1. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER AND OF THE MANUFACTURING AUTHORISATION HOLDER RESPONSIBLE FOR BATCH RELEASE, IF DIFFERENT

# Marketing authorisation holder:

Intervet International B. V. Wim de Körverstraat 35 5831 AN Boxmeer The Netherlands

# Manufacturer responsible for batch release:

Intervet UK Limited Walton Manor, Walton, Milton Keynes, Buckinghamshire, MK7 7AJ United Kingdom

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

Bravecto 112.5 mg spot-on solution for very small dogs (2-4.5 kg) Bravecto 250 mg spot-on solution for small dogs (>4.5 – 10 kg) Bravecto 500 mg spot-on solution for medium-sized dogs (>10 - 20 kg) Bravecto 1000 mg spot-on solution for large dogs (>20 – 40 kg) Bravecto 1400 mg spot-on solution for very large dogs (>40 – 56 kg) fluralaner

# 3. STATEMENT OF THE ACTIVE SUBSTANCE AND OTHER INGREDIENT(S)

Each ml contains 280 mg fluralaner. Each pipette delivers:

	Pipette content (ml)	Fluralaner (mg)
for very small dogs 2 – 4.5 kg	0.4	112.5
for small dogs >4.5 – 10 kg	0.89	250
for medium-sized dogs >10 – 20 kg	1.79	500
for large dogs >20 – 40 kg	3.57	1000
for very large dogs >40 – 56 kg	5.0	1400

Clear colourless to yellow solution.

### 4. INDICATIONS

For the treatment of tick and flea infestations in dogs.

This veterinary medicinal product is a systemic insecticide and acaricide that provides:

- immediate and persistent flea (Ctenocephalides felis and C. canis) killing activity for 12 weeks,
- immediate and persistent tick (*Ixodes ricinus, Rhipicephalus sanguineus* and *Dermacentor reticulatus*) killing activity for 12 weeks.

Fleas and ticks must attach to the host and commence feeding in order to be exposed to the active substance.

The product can be used as part of a treatment strategy for the control of flea allergy dermatitis (FAD).

#### 5. CONTRAINDICATIONS

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

#### 6. ADVERSE REACTIONS

Commonly observed adverse reactions such as erythema or alopecia in clinical trials (1.2% of treated dogs) were mild and transient skin reactions at the application site.

The frequency of adverse reactions is defined using the following convention:

- very common (more than 1 in 10 animals displaying adverse reaction(s) during the course of one treatment)
- common (more than 1 but less than 10 animals in 100 animals)
- uncommon (more than 1 but less than 10 animals in 1,000 animals)
- rare (more than 1 but less than 10 animals in 10,000 animals)
- very rare (less than 1 animal in 10,000 animals, including isolated reports).

If you notice any serious effects or other effects not mentioned in this package leaflet, please inform your veterinary surgeon.

### 7. TARGET SPECIES

Dogs.

### 8. DOSAGE FOR EACH SPECIES, ROUTE AND METHOD OF ADMINISTRATION

For spot-on use.

Bravecto should be administered in accordance with the following table (corresponding to a dose of 25-56 mg fluralaner/kg body weight):

Bodyweight	Strength and number of pipettes to be administered				
of dog (kg)	Bravecto	Bravecto	Bravecto	Bravecto	Bravecto
	112.5 mg	250 mg	500 mg	1000 mg	1400 mg
2 - 4.5	1				
>4.5 - 10		1			
>10 - 20			1		
>20 - 40				1	
>40 - 56					1

For dogs above 56 kg body weight, use a combination of two pipettes that most closely matches the body weight.

#### 9. ADVICE ON CORRECT ADMINISTRATION

### Method of administration:

**Step 1:** Immediately before use, open the sachet and remove the pipette. The pipette should be held by the base or by the upper rigid portion below the cap in an upright position (tip up) for opening it.

The twist-and-use cap should be rotated clockwise or counter clockwise one full turn. The cap will stay on the pipette; it is not possible to remove it. The pipette is open and ready for application when the breaking of the seal is felt.









**Step 2**: The dog should be standing or lying with its back horizontal during application. Place the pipette tip vertically against the skin between the shoulder blades of the dog.

**Step 3:** Squeeze the pipette gently and apply the entire contents directly to the dog's skin in one (when volume is small) or several spots along the dog's dorsal line from the shoulder to the base of the tail. Avoid the application of more than 1 ml of solution at any one spot as it could cause some of the solution to run or drip off the dog.







#### Treatment schedule:

For optimal control of tick and flea infestation, the product should be administered at intervals of 12 weeks.

#### 10. WITHDRAWAL PERIOD

Not applicable.

#### 11. SPECIAL STORAGE PRECAUTIONS

Keep out of the sight and reach of children.

This veterinary medicinal product does not require any special temperature storage conditions. The pipettes should be kept in the outer packaging to prevent solvent loss or moisture uptake. The sachets should only be opened immediately prior to use.

Do not use this veterinary medicinal product after the expiry date stated on the packaging after EXP. The expiry date refers to the last day of that month.

#### 12. SPECIAL WARNINGS

## Special warnings for each target species:

Parasites need to start feeding on the host to become exposed to fluralaner; therefore the risk of the transmission of parasite borne diseases cannot be excluded.

### Special precautions for use in animals

Care should be taken to avoid contact with the eyes of the animal. Do not use directly on skin lesions. Do not wash or allow the dog to become immersed in water or swim in water courses within 3 days after treatment.

In the absence of available data, this veterinary medicinal product should not be used on puppies less than 8 weeks old and /or dogs weighing less than 2 kg.

The product should not be administered at intervals shorter than 8 weeks as the safety at shorter intervals has not been tested.

This product is for topical use and should not be administered orally.

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

This product is harmful after ingestion. Keep the product in the original packaging until use, in order to prevent children from getting direct access to the product. A used pipette should immediately be disposed of. In case of accidental ingestion, seek medical advice and show the package leaflet or the label to the physician.

This product and the wet skin of a recently treated animal may be slightly irritating to skin and/or eyes. Avoid contact with skin and/or eye, including hand-to-eye contact. Do not eat, drink or smoke while handling the product. Do not contact, or allow children to contact the application site until it is dry; it is therefore recommended to treat the animal in the evening. On the day of treatment, treated animals should not be permitted to sleep in the same bed as their owner, especially children. Wash hands and contacted skin thoroughly with soap and water immediately after use of the product. In case of contact with the eyes, immediately rinse thoroughly with water.

The product is highly flammable. Keep away from heat, sparks, open flame or other sources of ignition.

The active ingredient in the product is highly lipophilic and binds to skin and may also bind to surfaces after spillage of the product.

The following precautions are therefore recommended:

- Wear suitable gloves when handling or applying the product to dogs and cats.
- In case of spillage onto, for example table or floor surfaces, remove excess product using paper tissue and clean the area with detergent.

Do not allow treated animals to come into contact with untreated animals until the application site is dry.

### Pregnancy, lactation and fertility:

Can be used in breeding, pregnant and lactating dogs.

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

None known.

Fluralaner is highly bound to plasma proteins and might compete with other highly bound medicinal products such as non-steroidal anti-inflammatory drugs (NSAIDs) and the coumarin derivative warfarin. Incubation of fluralaner in the presence of carprofen or warfarin in dog plasma at maximum expected plasma concentrations did not reduce the protein binding of fluralaner, carprofen or warfarin.

During laboratory and clinical field testing, no interactions between Bravecto spot-on solution for dogs and routinely used veterinary medicinal products were observed.

#### Overdose:

Safety was demonstrated in puppies aged 8–9 weeks and weighing 2.0–3.7 kg treated with overdoses of up to 5 times the maximum recommended dose on three occasions at shorter intervals than recommended (8-week intervals).

Safety was demonstrated in breeding, pregnant and lactating animals treated with overdoses of up to 3 times the maximum recommended dose.

This veterinary medicinal product was well tolerated in collies with a deficient multidrug-resistance-protein 1 (MDR1 -/-) following single oral administration at 3 times the maximum recommended dose.

# **Incompatibilities**:

None known.

# 13. SPECIAL PRECAUTIONS FOR THE DISPOSAL OF UNUSED PRODUCT OR WASTE MATERIALS, IF ANY

Medicines should not be disposed of via wastewater or household waste.

Ask your veterinary surgeon how to dispose of medicines no longer required. These measures should help to protect the environment.

#### 14. DATE ON WHICH THE PACKAGE LEAFLET WAS LAST APPROVED

Detailed information on this product is available on the website of the European Medicines Agency <a href="http://www.ema.europa.eu/">http://www.ema.europa.eu/</a>.

#### 15. OTHER INFORMATION

The product contributes towards the control of environmental flea populations in areas to which treated dogs have access.

The onset of efficacy is within 8 hours for fleas (*C. felis*) and 12 hours for ticks (*I. ricinus*). Unit dose pipette made of laminated aluminium/polypropylene foil closed with an HDPE cap and packed in a laminated aluminium foil sachet. Each carton box contains 1 or 2 pipettes. Not all pack sizes may be marketed.

#### **PACKAGE LEAFLET FOR:**

Bravecto 112.5 mg spot-on solution for small cats (1.2-2.8 kg)Bravecto 250 mg spot-on solution for medium-sized cats (>2.8-6.25 kg)Bravecto 500 mg spot-on solution for large cats (>6.25-12.5 kg)

# 1. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER AND OF THE MANUFACTURING AUTHORISATION HOLDER RESPONSIBLE FOR BATCH RELEASE, IF DIFFERENT

# Marketing authorisation holder:

Intervet International B. V. Wim de Körverstraat 35 5831 AN Boxmeer The Netherlands

# Manufacturer responsible for batch release:

Intervet UK Limited Walton Manor, Walton, Milton Keynes, Buckinghamshire, MK7 7AJ United Kingdom

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

Bravecto 112.5 mg spot-on solution for small cats (1.2-2.8 kg)Bravecto 250 mg spot-on solution for medium-sized cats (>2.8-6.25 kg)Bravecto 500 mg spot-on solution for large cats (>6.25-12.5 kg)fluralaner

# 3. STATEMENT OF THE ACTIVE SUBSTANCE(S) AND OTHER INGREDIENT(S)

Each ml contains 280 mg fluralaner. Each pipette delivers:

	Pipette content (ml)	Fluralaner (mg)
for small cats 1.2 – 2.8 kg	0.4	112.5
for medium-sized cats >2.8 – 6.25 kg	0.89	250
for large cats >6.25 – 12.5 kg	1.79	500

Clear colourless to yellow solution.

#### 4. INDICATIONS

For the treatment of tick and flea infestations in cats.

This veterinary medicinal product is a systemic insecticide and acaricide that provides immediate and persistent flea (*Ctenocephalides felis*) and tick (*Ixodes ricinus*) killing activity for 12 weeks.

Fleas and ticks must attach to the host and commence feeding in order to be exposed to the active substance.

The product can be used as part of a treatment strategy for the control of flea allergy dermatitis (FAD).

#### 5. CONTRAINDICATIONS

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

### 6. ADVERSE REACTIONS

Commonly observed adverse reactions in clinical trials were mild and transient skin reactions at the application site (2.2% of treated cats), such as erythema and pruritus or alopecia.

The following other signs shortly after administration were observed: apathy/tremors/anorexia (0.9% of treated cats) or vomiting/hypersalivation (0.4% of treated cats).

The frequency of adverse reactions is defined using the following convention:

- very common (more than 1 in 10 animals displaying adverse reaction(s) during the course of one treatment)
- common (more than 1 but less than 10 animals in 100 animals)
- uncommon (more than 1 but less than 10 animals in 1,000 animals )
- rare (more than 1 but less than 10 animals in 10,000 animals)
- very rare (less than 1 animal in 10,000 animals, including isolated reports).

If you notice any serious effects or other effects not mentioned in this package leaflet, please inform your veterinary surgeon.

# 7. TARGET SPECIES

Cats.

### 8. DOSAGE FOR EACH SPECIES, ROUTE(S) AND METHOD OF ADMINISTRATION

For spot-on use.

Bravecto should be administered in accordance with the following table (corresponding to a dose of 40-94 mg fluralaner/kg body weight):

Bodyweight of cat	Strength and number of pipettes to be administered				Strength and number of pipettes to be administered		
(kg)	Bravecto 112.5 mg	Bravecto 250 mg	Bravecto 500 mg				
1.2 - 2.8	1						
>2.8 - 6.25		1					
>6.25 – 12.5			1				

For cats above 12.5 kg body weight, use a combination of two pipettes that most closely matches the body weight.

## 9. ADVICE ON CORRECT ADMINISTRATION

#### Method of administration:

**Step 1:** Immediately before use, open the sachet and remove the pipette. The pipette should be held by the base or by the upper rigid portion below the cap in an upright position (tip up) for opening it.

The twist-and-use cap should be rotated clockwise or counter clockwise one full turn. The cap will stay on the pipette; it is not possible to remove it. The pipette is open and ready for application when the breaking of the seal is felt.



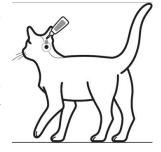






**Step 2**: The cat should be standing or lying with its back horizontal for easy application. Place the pipette tip on the base of the skull of the cat.

**Step 3:** Squeeze the pipette gently and apply the entire contents directly to the cat's skin. The product should be applied on cats up to 6.25 kg body weight in one spot at the base of the skull and in two spots on cats greater than 6.25 kg bodyweight.



# Treatment schedule:

For optimal control of tick and flea infestation, the product should be administered at intervals of 12 weeks.

#### 10. WITHDRAWAL PERIOD

Not applicable.

#### 11. SPECIAL STORAGE PRECAUTIONS

Keep out of the sight and reach of children.

This veterinary medicinal product does not require any special temperature storage conditions. The pipettes should be kept in the outer packaging to prevent solvent loss or moisture uptake. The sachets should only be opened immediately prior to use.

Do not use this veterinary medicinal product after the expiry date stated on the packaging after EXP. The expiry date refers to the last day of that month.

#### 12. SPECIAL WARNINGS

### Special warnings for each target species:

Parasites need to start feeding on the host to become exposed to fluralaner; therefore the risk of the transmission of parasite borne diseases cannot be excluded.

# Special precautions for use in animals

Care should be taken to avoid contact with the eyes of the animal. Do not use directly on skin lesions. In the absence of available data, this veterinary medicinal product should not be used on kitten less than 11 weeks old and /or cats weighing less than 1.2 kg.

The product should not be administered at intervals shorter than 8 weeks as the safety at shorter intervals has not been tested.

This product is for topical use and should not be administered orally.

Do not allow recently treated animals to groom each other.

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

This product is harmful after ingestion. Keep the product in the original packaging until use, in order to prevent children from getting direct access to the product. A used pipette should immediately be disposed of. In case of accidental ingestion, seek medical advice and show the package leaflet or the label to the physician.

This product and the wet skin of a recently treated animal may be slightly irritating to skin and/or eyes. Avoid contact with skin and/or eye, including hand-to-eye contact. Do not eat, drink or smoke while handling the product. Do not contact, or allow children to contact the application site until it is dry; it is therefore recommended to treat the animal in the evening. On the day of treatment, treated animals should not be permitted to sleep in the same bed as their owner, especially children. Wash hands and contacted skin thoroughly with soap and water immediately after use of the product. In case of contact with the eyes, immediately rinse thoroughly with water.

The product is highly flammable. Keep away from heat, sparks, open flame or other sources of ignition.

The active ingredient in the product is highly lipophilic and binds to skin and may also bind to surfaces after spillage of the product.

The following precautions are therefore recommended:

- Wear suitable gloves when handling or applying the product to dogs and cats.
- In case of spillage onto, for example table or floor surfaces, remove excess product using paper tissue and clean the area with detergent.

Do not allow treated animals to come into contact with untreated animals until the application site is dry.

### Pregnancy, lactation and fertility:

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

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

None known.

Fluralaner is highly bound to plasma proteins and might compete with other highly bound medicinal products such as non-steroidal anti-inflammatory drugs (NSAIDs) and the coumarin derivative warfarin. Incubation of fluralaner in the presence of carprofen or warfarin in dog plasma at maximum expected plasma concentrations did not reduce the protein binding of fluralaner, carprofen or warfarin.

During laboratory and clinical field testing, no interactions between Bravecto spot-on solution for cats and routinely used veterinary medicinal products were observed.

# Overdose:

Safety was demonstrated in kitten aged 11-13 weeks and weighing 1.2-1.5 kg treated with overdoses of up to 5 times the maximum recommended dose on three occasions at shorter intervals than recommended (8-week intervals).

Oral uptake of the product at the maximum recommended dose was well tolerated in cats, apart from some self-limiting salivation and coughing or vomiting immediately after administration.

### Incompatibilities:

None known

# 13. SPECIAL PRECAUTIONS FOR THE DISPOSAL OF UNUSED PRODUCT OR WASTE MATERIALS, IF ANY

Medicines should not be disposed of via wastewater or household waste.

Ask your veterinary surgeon how to dispose of medicines no longer required. These measures should help to protect the environment.

#### 14. DATE ON WHICH THE PACKAGE LEAFLET WAS LAST APPROVED

Detailed information on this product is available on the website of the European Medicines Agency (<a href="http://www.ema.europa.eu/">http://www.ema.europa.eu/</a>).

# 15. OTHER INFORMATION

The product contributes towards the control of environmental flea populations in areas to which treated cats have access.

The onset of efficacy is within 12 hours for fleas (*C. felis*) and within 48 hours for ticks (*I. ricinus*). Unit dose pipette made of laminated aluminium/polypropylene foil closed with an HDPE cap and packed in a laminated aluminium foil sachet. Each carton box contains 1 or 2 pipettes. Not all pack sizes may be marketed.