SUMMARY OF PRODUCT CHARACTERISTICS

1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Advantage Chewable 112 mg chewable tablets for dogs (>2.5–5.5 kg)

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Active substance:

Each chewable tablet contains:

Advantage Chewable tablets	Iotilaner (mg)
for dogs (>2.5–5.5 kg)	112.5

Excipients:

For the full list of excipients, see section 6.1.

3. PHARMACEUTICAL FORM

Chewable tablet.
White to beige round chewable tablets with brownish spots.

4. CLINICAL PARTICULARS

4.1 Target species

Dogs

4.2 Indications for use, specifying the target species

For the treatment of flea and tick infestations in dogs.

This veterinary medicinal product provides immediate and persistent killing activity for 1 month for fleas (*Ctenocephalides felis* and *C. canis*) and ticks (*Rhipicephalus sanguineus, Ixodes ricinus, I. hexagonus* and *Dermacentor reticulatus*).

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

The veterinary medicinal product can be used as part of a treatment strategy for the control of Flea Allergy Dermatitis (FAD), where this has been previously diagnosed by a veterinary surgeon.

4.3 Contraindications

Do not use in cases 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 Lotilaner; therefore, the risk of the transmission of parasite borne diseases cannot be completely excluded.

The possibility that other animals in the same household can be a source of re-infection with fleas should be considered, and these should be treated as necessary with an appropriate product.

All stages of fleas can infest the dog's bedding and regular resting areas such as carpets and soft furnishings. In case of massive flea infestation and at the beginning of the control measures, these areas should be treated with a suitable environmental product and then vacuumed regularly.

4.5 Special precautions for use

i). Special precautions for use in animals

All safety and efficacy data have been acquired from dogs and puppies 8 weeks of age and older and 1.3 kg of body weight and greater. In the absence of available data, a veterinarian should be consulted before treatment in puppies younger than 8 weeks of age or less than 1.3 kg of body weight.

Inform your veterinary surgeon that you are using this product if s/he provides your dog with any other medication.

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

Wash hands after handling the product.

<u>Special precautions for the protection of the environment</u>:

The active substance is mostly excreted in the faeces (poo) and may be toxic to non-target organisms. In order to avoid contamination of the environment, ensure that dog faeces are bagged up and disposed of safely.

iii) Other precautions

Not applicable

4.6 Adverse reactions (frequency and seriousness)

Target species: Dogs

Very rare (<1 animal / 10,000 animals treated, including isolated reports):	Diarrhoea[1,2], Vomiting[1,2]; Anorexia[1,2], Lethargy[2]; Ataxia[3], Convulsion[3], Tremor[3]

[1] Mild and transient
[2] Typically resolve without treatment
[3] Transient in most cases

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 also the last section of the package leaflet for respective contact details.

4.7 Use during pregnancy, lactation or lay

The safety of the veterinary medicinal product has not been established during pregnancy, lactation or in breeding dogs.

Pregnancy and lactation:
Laboratory studies in rats have not produced any evidence of teratogenic effects, or any adverse effect on the reproductive capacity of males and females. The safety of the veterinary medicinal product in breeding, pregnant and lactating dogs has not been established. Consult a veterinarian before treatment during pregnancy and lactation.

Fertility:
Consult a veterinarian before treatment in breeding dogs.

4.8 Interaction with other medicinal products and other forms of interaction

None known.

During clinical testing, no interactions between lotilaner and routinely used veterinary medicinal products were observed.

4.9 Amount(s) to be administered and administration route

For oral use.

The veterinary medicinal product should be administered in accordance with the following table to ensure a dose of 20 to 43 mg lotilaner/kg bodyweight.

Body weight of dog (kg)	Strength and number of tablets to be administered				
	Advantage Chewable 56 mg	Advantage Chewable 112 mg	Advantage Chewable 225 mg	Advantage Chewable 450 mg	Advantage Chewable 900 mg
1.3–2.5	1				
Greater than 2.5–5.5		1			
Greater than 5.5–11.0			1		
Greater than 11.0–22.0				1	
Greater than 22.0–45.0					1
Greater than 45	Appropriate combination of tablets				

For dogs of more than 45 kg body weight, use an appropriate combination of available strengths to achieve the recommended dose of 20–43 mg/kg.

Underdosing could result in ineffective use and may favour resistance development.

To ensure a correct dosage, body weight should be determined as accurately as possible.

Advantage Chewable is a palatable chewable flavoured tablet. Administer with food or within 30 minutes of feeding.

For optimal control of flea and tick infestation, the product should be administered at monthly intervals throughout the flea and/or tick seasons, based on local epidemiological situations.

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 1.3–3.6 kg treated with overdoses of up to 5 times the maximum recommended dose (43 mg, 129 mg and 215 mg lotilaner/kg bodyweight) on eight occasions at monthly intervals.

4.11 Withdrawal period(s)

Not applicable

5. PHARMACOLOGICAL PROPERTIES

Pharmacotherapeutic group: ectoparasiticides for systemic use, isoxazolines.

ATC Vet Code: QP53BE04

5.1 Pharmacodynamic properties

Lotilaner, a pure enantiomer from the isoxazoline class, is active against fleas (*Ctenocephalides felis* and *Ctenocephalides canis*) and the tick species *Dermacentor reticulatus, Ixodes hexagonus, Ixodes ricinus* and *Rhipicephalus sanguineus*.

Lotilaner is a potent inhibitor of gamma–aminobutyric acid (GABA)-gated chloride channels, resulting in rapid death of ticks and fleas. The activity of Lotilaner was not affected by resistance to organochlorines (cyclodienes, e.g. dieldrin), phenylpyrazoles (e.g. fipronil), neonicotinoids (e.g. imidacloprid), formamidines (e.g. amitraz) and pyrethroids (e.g. cypermethrin).

For fleas, the onset of efficacy is within 4 hours of attachment for one month after product administration. Fleas on the animal prior to administration are killed within 6 hours.

For ticks, the onset of efficacy is within 48 hours of attachment for one month after product administration. Existing *I. ricinus* ticks on the animal prior to administration are killed within 8 hours.

The veterinary medicinal product kills existing and newly emerged fleas on dogs before they can lay eggs. Therefore, the product breaks the flea life cycle and prevents environmental flea contamination in areas to which the dog has access.

5.2 Pharmacokinetic particulars

Following oral administration, lotilaner is readily absorbed and peak blood concentration is reached within 2 hours. Food enhances the absorption. The terminal half-life is approximately 4 weeks. This terminal half-life provides effective blood concentrations for the entire duration of the inter-dosing interval.

The major route of elimination is biliary excretion, and renal excretion is the minor route of elimination (less than 10 % of the dose). Lotilaner is metabolized to a small extent into more hydrophilic compounds, which are observed in faeces and urine.

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Cellulose, powdered
Lactose monohydrate
Silicified microcrystalline cellulose
Meat dry flavour
Crospovidone
Povidone K30
Sodium laurilsulfate

Silica, colloidal anhydrous
Magnesium stearate

6.2 Major Incompatibilities

Not applicable

6.3 Shelf life

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

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

The tablets are packaged in aluminium/ aluminium blisters packaged into an outer cardboard box. Each tablet strength is available in pack sizes of 1 or 3 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 product should be disposed of in accordance with local requirements.

7. MARKETING AUTHORISATION HOLDER

Elanco GmbH
Heinz-Lohmann Strasse 4
Groden
D-27472 Cuxhaven
Germany

8. MARKETING AUTHORISATION NUMBER

Vm 52127/5047

9. DATE OF FIRST AUTHORISATION

03 October 2023

10. DATE OF REVISION OF THE TEXT

January 2025

11. CLASSIFICATION OF VETERINARY MEDICINAL PRODUCTS

Veterinary medicinal product not subject to prescription.

Gavin Hall

Approved: 21 January 2025