SUMMARY OF PRODUCT CHARACTERISTICS

1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Neptra ear drops solution for dogs

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

1 dose (1 ml) contains:

Active substances:

Florfenicol: 16.7 mg
Terbinafine hydrochloride: 16.7 mg, equivalent to
terbinafine base: 14.9 mg Mometasone furoate: 2.2 mg

Qualitative composition of excipients and other constituents
Propylene carbonate
Propylene glycol
Ethanol (96 per cent)
Macrogol 8000
Water, purified

Clear, colourless to yellow, slightly viscous liquid.

3. CLINICAL INFORMATION

3.1 Target species

Dogs

3.2 Indications for use for each target species

For the treatment of acute canine otitis externa or acute exacerbations of recurrent otitis caused by mixed infections of susceptible strains of bacteria sensitive to florfenicol (*Staphylococcus pseudintermedius*) and fungi sensitive to terbinafine (*Malassezia pachydermatis*).

3.3 Contraindications

Do not use in case of hypersensitivity to the active substances, to other corticosteroids or to any of the excipients.
Do not use if the ear drum is perforated.
Do not use in dogs with generalised demodicosis. Do not use in pregnant or

breeding animals.

3.4 Special warnings

Bacterial and fungal otitis is often secondary to other conditions. In animals with a history of recurrent otitis externa, the underlying causes of the condition such as allergy or anatomical conformation of the ear must be addressed in order to avoid ineffective treatment with a veterinary medicinal product.

In cases of parasitic otitis, an appropriate acaricidal treatment should be implemented

Ears must be cleaned before administration of the product. It is recommended not to repeat ear cleaning until 28 days after administration of the product. In clinical trials, only saline was used for ear cleaning before treatment initiation with the veterinary medicinal product.

This combination is intended for the treatment of acute otitis when mixed infections caused by *Staphylococcus pseudintermedius* susceptible to florfenicol and *Malassezia pachydermatis* susceptible to terbinafine have been demonstrated.

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 3 months of age. Target animal safety was not studied in dogs under 4 kg bodyweight. However, no safety issues were identified in field studies in dogs weighing less than 4kg.

Before the veterinary medicinal product is applied, the external auditory canal must be examined thoroughly to ensure that the ear drum is not perforated.
Re-evaluate the dog if hearing loss or signs of vestibular dysfunction are observed during treatment.

After the administration, wet ears or clear discharge can be observed which is not related to the disease pathology.

Use of the product should be based on identification and susceptibility testing of the target pathogen(s). If this is not possible, therapy should be based on epidemiological information and knowledge of susceptibility of the target pathogens at local/ regional level.
Use of the product should be in accordance with official, national and regional antimicrobial policies.

Use of the veterinary medicinal product deviating from the instructions given in the Summary of Product Characteristics (SPC) may increase the prevalence of bacteria resistant to florfenicol and fungi resistant to terbinafine and may decrease the effectiveness of treatment with other antibiotics and antifungal agents.
Decreased cortisol levels were observed after product instillation in tolerance studies (before and after ACTH stimulation), indicating that mometasone furoate

is absorbed and enters the systemic circulation. The main findings observed at the 1X dose were decreases in cortical response to ACTH stimulation, decreased absolute lymphocyte and eosinophil counts, and decreased adrenal weight.
Prolonged and intensive use of topical corticosteroid preparations is known to trigger systemic effects, including suppression of adrenal function (see section 4.10).

If hypersensitivity to any of the components occurs, the ear should be thoroughly washed. Additional corticosteroid treatments should be avoided.

Use with caution in dogs with a suspected or confirmed endocrine disorder (e.g., diabetes mellitus, hypo- or hyperthyroidism, etc.).

Caution should be taken to prevent the veterinary medicinal product from getting into the eyes of the dog being treated e.g. by restraining the dog's head to prevent shaking (see section 4.9). In case of exposure to the eye, rinse with plenty of water.

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

The veterinary medicinal product has serious eye irritation potential. Accidental eye exposure may occur when the dog shakes its head during or just after administration. To avoid this risk for the owners, it is recommended that this veterinary product is administered only by veterinarians or under their close supervision. Appropriate measures (e.g. wearing safety glasses during administration, massaging the ear canal well after administration to ensure even distribution of product, restraining the dog after administration) are needed to avoid exposure to the eyes. In case of accidental ocular exposure, flush the eyes thoroughly with water for 10 to 15 minutes. If symptoms develop, seek medical advice and show the package leaflet or the label to the physician.
Although no potential for skin irritation was indicated by experimental studies, contact of the product with the skin should be avoided. In case of accidental skin contact, wash exposed skin thoroughly with water.
May be harmful after ingestion. Avoid ingestion of the product including hand-to-mouth exposure. 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.

Other precautions:

The safety and efficacy of the veterinary medicinal product in cats has not been evaluated. Post- marketing surveillance shows that the use of the product in cats can be associated with neurological signs (including ataxia, Horner's syndrome with protrusion of membrane nictitans, miosis, anisocoria), internal ear disorders (head tilt) and systemic signs (anorexia and lethargy). The use of the veterinary medicinal product in cats should therefore be avoided.

3.6 Adverse events

Dog

Very rare (<1 animal / 10,000 animals treated, including isolated reports):	Application site erythema, Application site inflammation, Application site pain[1] Hyperactivity, Vocalisation[1] Emesis Deafness[2], Impaired hearing[2], Internal ear disorder, Head shake[1] Eye disorder (e.g. blepharospasm, conjunctivitis, corneal ulcer, eye irritation, keratoconjunctivitis sicca) Ataxia, Facial paralysis, Nystagmus Anorexia

[1]Observed to occur shortly after product administration.
[2]Mainly in elderly animals

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

The safety of the veterinary medicinal product has not been established during pregnancy and lactation.

Pregnancy and lactation:
Do not use during pregnancy and lactation.

Fertility:
Studies to determine the effect on fertility in dogs have not been conducted. Do not use in breeding animals.

3.8 Interaction with other medicinal products and other forms of interaction

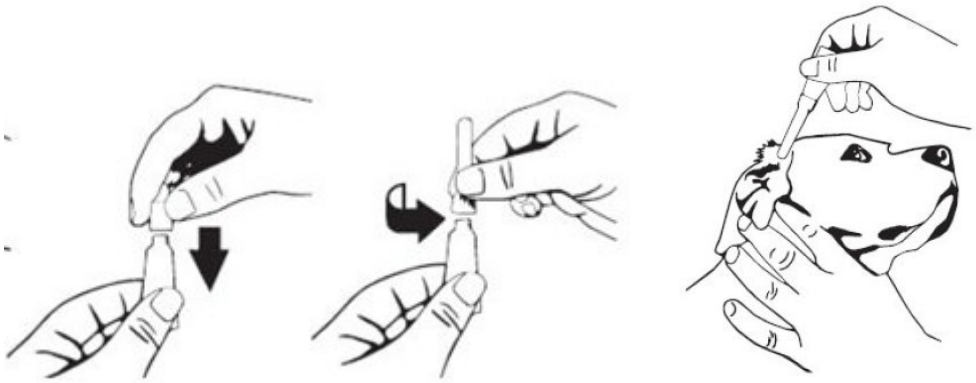
None known.
Compatibility with ear cleaners, other than saline solution, has not been demonstrated.

3.9 Administration routes and dosage

Auricular use.
Single treatment

The recommended dosage is 1 single-dose container (i.e. 1 ml of solution) per infected ear. The maximum clinical response may not be seen until 28 days after administration.

Shake well before use for 5 seconds.
Clean and dry the external ear canal before administering the product.
While holding the single-use container in an upright position, remove the cap.
Use the upper end of the cap to completely break the seal and then remove cap from the single-use container.
Screw the applicator nozzle onto the single-use container.
Insert the applicator nozzle into the affected external ear canal and squeeze the entire contents into the ear.
Gently massage the base of the ear for 30 seconds to allow distribution of the solution. Restrain the dog's head to prevent shaking, for 2 minutes.



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

Auricular administration of up to five times the recommended dose at biweekly intervals for a total of three treatments was generally well tolerated.
The most prominent effects were consistent with glucocorticoid administration; specific observations included suppression of the adrenal cortical response to ACTH-stimulation, decreased adrenal weight and atrophy of the adrenal cortex, decreased absolute lymphocyte and eosinophil counts, increased absolute neutrophil count, increased liver weight with hepatocellular enlargement/cytoplasmic change, and decreased thymus weight.
Other potentially treatment-related effects included mild changes to aspartate aminotransferase (AST), total protein, cholesterol, inorganic phosphorus, creatinine and calcium. After 3 weekly administrations of up to 5x the recommended posology, the test product induced slight erythema in one or both ears that returned to normal within 48 hours.

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

For administration only by a veterinarian or under their close supervision.

3.12 Withdrawal periods

Not applicable

4. PHARMACOLOGICAL INFORMATION

4.1 ATCvet code:

QS02CA91

4.2 Pharmacodynamics

The veterinary medicinal product is a fixed combination of three active substances (corticosteroid, antifungal and antibiotic).
Mometasone furoate is a corticosteroid with high potency. Like other corticosteroids, it has anti- inflammatory and anti-pruritic properties.
Terbinafine hydrochloride is an allylamine with a pronounced fungicidal activity. It selectively inhibits the early synthesis of ergosterol, which is an essential component of the membrane of yeasts and fungi including *Malassezia pachydermatis* (MIC$_{90}$ of 1 µg/ml). Terbinafine hydrochloride has a different mode of action to azole antifungals, therefore there is no cross-resistance with azole antifungals. Decreased *in vitro* susceptibility to terbinafine has been reported for strains of *Malassezia pachydermatis* which form biofilms.
Florfenicol is a bacteriostatic antibiotic which acts by inhibiting protein synthesis, through binding to and acting on the 50S ribosomal subunit of bacteria. Its spectrum of activity includes Gram-positive and Gram-negative bacteria including *Staphylococcus pseudintermedius* (MIC$_{90}$ of 2 µg/ml). *In vitro* activity of florfenicol against *Pseudomonas spp.* is low (MIC$_{90}$ > 128 µg/ml).
Florfenicol resistance genes detected in staphylococci include *cfr* and *fexA*. *Cfr* modifies the RNA in the drug binding site (causing reduced affinity to chloramphenicol, florfenicol and clindamycin) and the *cfr* gene can be present in plasmids or other transmissible elements. *FexA* codes for a membrane associated efflux system (affecting both florfenicol and chloramphenicol efflux) and is found in chromosomes as well as in plasmids.

4.3 Pharmacokinetics

Systemic absorption of the three active substances was determined after single co-administration into one ear canal of healthy beagle dogs. Mean peak plasma concentrations (C_{max}) were low with 1.73 ng/ml florfenicol, 0.35 ng/ml mometasone furoate and 7.83 ng/ml terbinafine HCl reached at the t_{max} of 24 h, 0.5 h and 20 h after treatment, respectively.
The extent of transcutaneous absorption of topical medications is determined by many factors including the integrity of the epidermal barrier. Inflammation can increase the transcutaneous absorption of veterinary medicinal products across

the skin adjacent to the external opening of the ear canal.

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.

5.2 Shelf life

Shelf life of the veterinary medicinal product as packaged for sale: 18 months

5.3 Special precautions for storage

Do not store above 25°C

5.4 Nature and composition of immediate packaging

Single-use sealed laminated tube containing 1 ml solution, with polypropylene cap and separate LDPE applicator nozzle packed in a transparent plastic blister.

Carton containing 1, 2, 10 or 20 blisters.

Not all pack sizes may be marketed.

5.5 Special precautions for the disposal of unused veterinary medicinal product 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

Elanco Animal Health GmbH

7. MARKETING AUTHORISATION NUMBER

Vm 04895/5007

8. DATE OF FIRST AUTHORISATION

10 December 2019

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

August 2025

10. CLASSIFICATION OF VETERINARY MEDICINAL PRODUCT

Veterinary medicinal product subject to prescription.

Find more product information by searching for the ‘Product Information Database’ on www.gov.uk.

Gavin Hall

Approved 04 September 2025