## 1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Cosacthen 0.25 mg/ml solution for injection for dogs (AT, BE, CZ, DE, EE, EL, ES, FR, HR, HU, IE, IT, LU, NL, PL, PT, SK, SI, UK (NI))
Cosacthen vet 0.25 mg/ml solution for injection for dogs (DK, FI, NO, SE)

## 2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each ml contains:

**Active substance:**
Tetracosactide 0.25 mg
(equivalent to 0.28 mg tetracosactide hexaacetate)

**Excipients:**

| **Qualitative composition of excipients and other constituents** |
|---|
| Acetic acid, glacial |
| Sodium acetate trihydrate |
| Sodium chloride |
| Water for injections |

Clear, colourless solution.

## 3. CLINICAL INFORMATION

### 3.1 Target species

Dogs.

### 3.2 Indications for use for each target species

For the evaluation of adrenocortical function in dogs.

### 3.3 Contraindications

Do not use in pregnant animals, see section 3.7.
Do not use in cases of hypersensitivity to the active substance or to any of the excipients.

### 3.4 Special warnings

None.

### 3.5 Special precautions for use

Special precautions for safe use in the target species:

The safety of the veterinary medicinal product has not been established in dogs under 5 months of age or weighing less than 4.5 kg.
Safety of the veterinary medicinal product has not been established in dogs with diabetes mellitus or hypothyroidism.
Use only according to the benefit-risk assessment by the responsible veterinarian.

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

Tetracosactide can cause hypersensitivity in people, particularly those with existing allergic disorders, such as asthma. People with such allergic disorders, or a known hypersensitivity to tetracosactide, ACTH or any of the excipients, should avoid contact with the veterinary medicinal product. If you develop clinical symptoms following exposure, such as skin reactions, nausea, vomiting, oedema and dizziness, or any signs of anaphylactic shock, you should seek medical advice immediately and show the package leaflet or label to the physician.

Wash hands after use.

Tetracosactide has not been tested in reproductive or developmental toxicity studies, but the pharmacological effects on the hypothalamic-pituitary-adrenal axis can have adverse effects in pregnancy. Therefore, the veterinary medicinal product should not be administered by pregnant women. In case of accidental self-injection, seek medical advice immediately and show the package leaflet or the label to the physician.

Special precautions for the protection of the environment:

Not applicable.

### 3.6 Adverse events

Dogs:

| | |
|---|---|
| Common<br>(1 to 10 animals / 100 animals treated): | Vomiting |
| Uncommon<br>(1 to 10 animals / 1,000 animals treated): | Injection site bruising[a], Injection site haematoma[b]<br>Depression<br>Diarrhoea<br>Lameness<br>Nervousness |

[a]After intramuscular administration.

[b]After intravenous administration.

Reporting adverse events is important. It allows continuous safety monitoring of a veterinary medicinal product. Reports should be sent, preferably via a veterinarian, to either the marketing authorisation holder or its local representative or the national competent authority via the national reporting system. See the package leaflet for respective contact details.

### 3.7 Use during pregnancy, lactation or lay

Pregnancy and lactation:
Tetracosactide affects the hypothalamic-pituitary-adrenal (HPA) axis, which can be detrimental to the foetus.
Do not use (during the whole or part of the pregnancy).
The safety of the veterinary medicinal product has not been established during lactation.
The use is not recommended during lactation.

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

Before performing an ACTH stimulation test, ensure that a sufficient wash-out period has elapsed since the administration of any medicinal product which may either cross-react with the cortisol assay, or have an effect on the hypothalamic-pituitary-adrenal (HPA) axis.

The HPA axis may be affected by medicinal products which either interact with glucocorticoid receptors, or which affect the pathways involved in the synthesis and release of cortisol from the adrenal gland.

### 3.9 Administration routes and dosage

Intravenous or intramuscular use.

Administer 5 µg/kg (0.02 ml/kg) by intravenous or intramuscular injection, with the purpose of performing the ACTH stimulation test. Take the first blood sample immediately prior to administering the veterinary medicinal product, and take the second blood sample between 60 and 90 minutes after administration of the veterinary medicinal product, to assess the cortisol response.

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

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

In a tolerance study where eight dogs were administered 280 µg/kg tetracosactide (56 times the recommended dose) intravenously once weekly for three weeks, hypersalivation occurred on eight of 24 dosing occasions (33 % incidence). In the same study, injected mucous membranes, inguinal erythema, facial oedema, and tachycardia, characteristic of a hypersensitivity reaction was observed in one dog following administration of the third dose.

### 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

### 3.12 Withdrawal periods

Not applicable.

## 4. PHARMACOLOGICAL INFORMATION

### 4.1 ATCvet code: QH01AA02

### 4.2 Pharmacodynamics

Tetracosactide is a synthetic polypeptide, which consists of the first 24 amino acids of adrenocorticotropic hormone (ACTH). The administration of tetracosactide results in cortisol concentrations that are significantly elevated compared to baseline values. Administration of tetracosactide at a dose of 5 µg/kg, either by intravenous or intramuscular administration, leads to a maximum concentration of cortisol at 60 to 90 minutes after administration. Doses lower than 5 µg/kg result in a shorter duration of maximal cortisol secretion than a dose of 5 µg/kg. Doses higher than 5 µg/kg do not cause higher peak cortisol concentrations.

### 4.3 Pharmacokinetics

Compared to intramuscular administration, intravenous administration of tetracosactide results in a higher maximum plasma concentration (Cmax) of immunoreactive (IR)-ACTH, a measurement which includes both endogenous ACTH and tetracosactide. By either route of administration, the time of peak concentration (Tmax) of IR-ACTH occurs at or before 30 minutes following administration. Peptidases rapidly break tetracosactide down into smaller peptides, with a return to baseline IR-ACTH concentrations attained by 120 minutes post-dosing.

## 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: 2 years.
For single use only, any veterinary medicinal product remaining after first use must be discarded.

### 5.3 Special precautions for storage

Store in a refrigerator (2 °C – 8 °C).
Keep the vial in the outer carton in order to protect from light.

### 5.4 Nature and composition of immediate packaging

Type I clear glass vial with a coated rubber stopper and aluminium seal packed in a cardboard box.
Pack size: 1 ml vial per box.

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

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

Use take-back schemes for the disposal of any unused veterinary medicinal product or waste materials derived thereof in accordance with local requirements and with any national collection systems applicable to the veterinary medicinal product concerned.

## 6. NAME OF THE MARKETING AUTHORISATION HOLDER

## 7. MARKETING AUTHORISATION NUMBER(S)

## 8. DATE OF FIRST AUTHORISATION

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

## 10. CLASSIFICATION OF VETERINARY MEDICINAL PRODUCTS

Veterinary medicinal product subject to prescription.

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

**ANNEX III**

**LABELLING AND PACKAGE LEAFLET**

# A. LABELLING

**PARTICULARS TO APPEAR ON THE OUTER PACKAGE**

**CARDBOARD BOX**

## 1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Cosacthen 0.25 mg/ml solution for injection

## 2. STATEMENT OF ACTIVE SUBSTANCES

Each ml contains:
Tetracosactide 0.25 mg
(equivalent to 0.28 mg tetracosactide hexaacetate)

## 3. PACKAGE SIZE

1 ml

## 4. TARGET SPECIES

Dogs.

## 5. INDICATIONS

## 6. ROUTES OF ADMINISTRATION

Intramuscular or intravenous use.

## 7. WITHDRAWAL PERIODS

## 8. EXPIRY DATE

Exp. {mm/yyyy}
Once broached use immediately.

## 9. SPECIAL STORAGE PRECAUTIONS

Store in a refrigerator.
Keep the vial in the outer carton in order to protect from light.

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

This product may cause hypersensitivity reactions and/or can have adverse effects in pregnant women. Read the package leaflet before use.

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

For animal treatment only.

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

Keep out of the sight and reach of children.

## 13. NAME OF THE MARKETING AUTHORISATION HOLDER

## 14. MARKETING AUTHORISATION NUMBERS

## 15. BATCH NUMBER

Lot {number}

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

**VIAL LABEL**

## 1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Cosacthen

## 2. QUANTITATIVE PARTICULARS OF THE ACTIVE SUBSTANCES

Tetracosactide 0.25 mg/ml

## 3. BATCH NUMBER

Lot {number}

## 4. EXPIRY DATE

Exp. {mm/yyyy}
Once broached use immediately.

# B. PACKAGE LEAFLET

# PACKAGE LEAFLET

## 1. Name of the veterinary medicinal product

Cosacthen 0.25 mg/ml solution for injection for dogs

## 2. Composition

Each ml contains:

**Active substance:**
Tetracosactide 0.25 mg/ml
(equivalent to 0.28 mg tetracosactide hexaacetate)

Clear, colourless solution.

## 3. Target species

Dogs.

## 4. Indications for use

For the evaluation of adrenocortical function in dogs.

## 5. Contraindications

Do not use in pregnant animals.
Do not use in cases of hypersensitivity to the active substances or to any of the excipients.

## 6. Special warnings

Special precautions for safe use in the target species:
The safety of the veterinary medicinal product has not been established in dogs under 5 months of age or weighing less than 4.5 kg.
The safety of the veterinary medicinal product has not been established in dogs with diabetes mellitus or hypothyroidism.
Use only according to the benefit-risk assessment by the responsible veterinarian.

Special precautions to be taken by the person administering the veterinary medicinal product to animals:
Tetracosactide can cause hypersensitivity in people, particularly those with existing allergic disorders, such as asthma. People with such allergic disorders, or a known hypersensitivity to tetracosactide, ACTH or any of the excipients, should avoid contact with the veterinary medicinal product. If you develop clinical symptoms following exposure, such as skin reactions, nausea, vomiting, oedema and dizziness, or any signs of anaphylactic shock, you should seek medical advice immediately and show the package leaflet or label to the physician.

Wash hands after use.

Tetracosactide has not been tested in reproductive or developmental toxicity studies, but the pharmacological effects on the hypothalamic-pituitary-adrenal axis can have adverse effects in pregnancy. Therefore, the veterinary medicinal product should not be administered by pregnant women.
In case of accidental self-injection, seek medical advice immediately and show the package leaflet or the label to the physician.

Pregnancy and lactation:
Tetracosactide affects the hypothalamic-pituitary-adrenal (HPA) axis, which can be detrimental to the foetus.
Do not use (during the whole or part of the pregnancy).
The safety of the veterinary medicinal product has not been established during lactation.
The use is not recommended during lactation.

Interaction with other medicinal products and other forms of interaction:
Before performing an ACTH stimulation test, ensure that a sufficient wash-out period has elapsed since the administration of any medicinal product which may either cross-react with the cortisol assay, or have an effect on the hypothalamic-pituitary-adrenal (HPA) axis.

Overdose:
In a tolerance study where eight dogs were administered 280 µg/kg tetracosactide (56 times the recommended dose) intravenously once weekly for three weeks, hypersalivation occurred on eight of 24 dosing occasions (33% incidence). In the same study, injected mucous membranes, inguinal erythema, facial oedema, and tachycardia, characteristic of a hypersensitivity reaction was observed in one dog following administration of the third dose.

Major incompatibilities:
In the absence of compatibility studies, this veterinary medicinal product must not be mixed with other veterinary medicinal product.

## 7. Adverse events

Dogs:

| | |
|---|---|
| Common<br>(1 to 10 animals / 100 animals treated): | Vomiting |
| Uncommon<br>(1 to 10 animals / 1,000 animals treated): | Injection site bruising[a], Injection site haematoma[b]<br>Depression<br>Diarrhoea<br>Lameness<br>Nervousness |

[a]After intramuscular administration.

[b]After intravenous administration.

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

authorisation holder using the contact details at the end of this leaflet, or via your national reporting system: {national system details}.

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

Intravenous or intramuscular use.

Administer 5 µg/kg (0.02 ml/kg) by intravenous or intramuscular injection, with the purpose of performing the ACTH stimulation test. Take the first blood sample immediately prior to administering the veterinary medicinal product, and take the second blood sample between 60 and 90 minutes after administration of the veterinary medicinal product, to assess the cortisol response.

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

## 9. Advice on correct administration

## 10. Withdrawal periods

Not applicable.

## 11. Special storage precautions

Keep out of the sight and reach of children.

Store in a refrigerator (2 °C – 8 °C).
Keep the vial in the outer carton in order to protect from light.

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

Once broached use immediately. Any product remaining after first use must be discarded.

## 12. Special precautions for disposal

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

Use take-back schemes for the disposal of any unused veterinary medicinal product or waste materials derived thereof in accordance with local requirements and with any applicable national collection systems. These measures should help to protect the environment.

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

## 13. Classification of veterinary medicinal products

Veterinary medicinal product subject to prescription.

## 14. Marketing authorisation numbers and pack sizes

Pack size: 1 ml vial per box.

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

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

## 16. Contact details

Marketing authorisation holder and manufacturer responsible for batch release and contact details to report suspected adverse reactions:

Manufacturer responsible for batch release:
Eurovet Animal Health B.V.
Handelsweg 25
5531 AE Bladel
The Netherlands

Local representatives and contact details to report suspected adverse reactions:

For any information about this veterinary medicinal product, please contact the local representative of the marketing authorisation holder.

## 17. Other information