

*[Version 9, 03/2022]*

## **ANNEX I**

### **SUMMARY OF PRODUCT CHARACTERISTICS**

## 1. NAME OF THE VETERINARY MEDICINAL PRODUCT

VETEGLAN 0.075 mg/ml Solution for injection for cows, sows and mares.

## 2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each ml contains:

### Active substance:

d-Cloprostenol.....0.075 mg

as d- Cloprostenol sodium salt.....0.079 mg

### Excipients:

Qualitative composition of excipients and other constituents	Quantitative composition if that information is essential for proper administration of the veterinary medicinal product
Citric acid	
Chlorocresol	1.0 mg
Sodium hydroxide	
Water for injections	

Clear and colourless aqueous solution for injection.

## 3. CLINICAL INFORMATION

### 3.1. Target species

Cattle (cows), pigs (sows) and horses (mares).

### 3.2. Indications for use for each target species

#### Cows

- Synchronisation or induction of oestrus.
- Induction of parturition after day 270 of gestation.
- Treatment of ovarian dysfunction (persistent corpus luteum, luteal cyst).
- Treatment of clinical endometritis with the presence of a functional corpus luteum and pyometra.
- Induction of abortion up to day 150 of gestation.
- Expulsion of mummified foetuses.

- Delayed uterine involution
- Therapy for the treatment of ovarian cysts (9-14 days after initial administration of GnRH or analogue)

#### **Sows**

- Induction of parturition after day 114 of gestation.

#### **Mares**

- Induction of luteolysis in mares with a functional corpus luteum.

### **3.3. Contraindications:**

Do not use in pregnant animals unless it is desirable to induce parturition or interruption of pregnancy.

Do not use in animals with spastic dysfunctions of the gastrointestinal tract and/or respiratory system.

Do not use in cows or sows who may have a dystocic parturition due to abnormal position of a foetus, mechanical obstruction, etc..

Do not use in animals suffering cardiovascular or respiratory diseases.

Do not use by intravenous route.

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

### **3.4. Special warnings**

The response of cows to the synchronisation protocols is not homogeneous between herds, nor within the same herd, and may vary depending on the physiological state of the animal at the time of treatment (sensitivity and a functional state of the *corpus luteum*, age, physical condition, interval from calving, etc.).

### **3.5. Special precautions for use**

#### Special precautions for safe use in the target species

Induction of parturition and abortion may increase the risk of complications, retained placenta, foetal death and metritis.

To reduce the risk of anaerobic infections, which might be related to the pharmacological properties of prostaglandins, care should be taken to avoid injection through contaminated areas of skin. Clean and disinfect injection sites thoroughly before administration.

In case of oestrus induction in cows: from the 2<sup>nd</sup> day after injection, adequate heat detection is necessary.

Induction of parturition in sows before day 114 of gestation may result in an increased risk of stillbirths and the need for manual assistance at farrowing.

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

Prostaglandins of the F2 $\alpha$  type can be absorbed through the skin and may cause bronchospasm or miscarriage.

Take care to avoid self-injection or skin contact when handling the product.

Pregnant women, women of child-bearing age, asthmatics and people with bronchial or other respiratory problems, should avoid contact with, or wear disposable impervious gloves when administering the product.

Accidental spillage on the skin should be washed off immediately with soap and water.

In case of accidental self-injection or shortness of breath resulted from accidental inhalation or injection seek medical advice immediately and show the package leaflet or label to the physician.

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

Special precautions for the protection of the environment:

Not applicable.

**3.6. Adverse events**

Target species: Cows

Undetermined frequency:	Injection site anaerobic infection (swelling and crepitus) <sup>1</sup> Retained placenta <sup>2</sup>
-------------------------	---

<sup>1</sup>Anaerobic infection is common if anaerobic bacteria penetrate the tissue of the infection site. This applies especially to intramuscular injection and in particular to cows.

<sup>2</sup> Depending on the timing of treatment relative to the date of conception, the placental retention rate can be increased when used for induction of parturition.

Target species: Sows

Undetermined frequency:	Injection site anaerobic infection (swelling and crepitus) <sup>1</sup> Retained placenta <sup>2</sup> Behavioural changes <sup>3</sup>
-------------------------	---

<sup>1</sup>Anaerobic infection is common if anaerobic bacteria penetrate the tissue of the infection site. This applies especially to intramuscular injection and in particular to cows.

<sup>2</sup> Depending on the timing of treatment relative to the date of conception, the placental retention rate can be increased when used for induction of parturition

<sup>3</sup> Behavioural changes occur after treatment for induction of farrowing which are similar to those changes associated with natural farrowing and usually cease within 1 hour.

Target species: Mares

Undetermined frequency:	Injection site anaerobic infection (swelling and crepitus) <sup>1</sup> Retained placenta <sup>2</sup> Sweating <sup>3,4</sup> Increased respiratory rate <sup>4</sup> Increased heart rate <sup>4</sup> Abdominal discomfort <sup>4</sup> , diarrhoea <sup>4,5</sup> Depression <sup>4</sup> .
-------------------------	---

<sup>1</sup>*Anaerobic infection is common if anaerobic bacteria penetrate the tissue of the infection site. This applies especially to intramuscular injection and in particular to cows.*

<sup>2</sup>*Depending on the timing of treatment relative to the date of conception, the placental retention rate can be increased when used for induction of parturition*

<sup>3</sup>*Occurring within 20 minutes of treatment.*

<sup>4</sup>*When exceptionally high doses are given and are usually mild and transient.*

<sup>5</sup>*Watery*

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

### **3.7. Use during pregnancy and lactation**

Do not administer to pregnant animals unless it is desirable to induce parturition or interruption of pregnancy.

### **3.8. Interaction with other medicaments and other forms of interaction**

Do not administer the treatment together with non-steroidal anti-inflammatory drugs since they inhibit endogenous prostaglandin synthesis.

The activity of other oxytocic agents can be increased after the administration of cloprostenol.

### **3.9. Administration routes and dosage**

For intramuscular use.

**Cows:** 2 ml of the product / animal (equivalent to 150 µg d-Cloprostenol /animal)

*Induction of oestrus* (also in cows showing weak or silent heat): Administer the product after determination of the presence of a functional *corpus luteum* (6<sup>th</sup> to 18<sup>th</sup> day of cycle). Heat usually appears within 48-60 hours. Proceed to insemination 72-96h after treatment. If there is no sign of oestrus, the treatment may be repeated 11 days after the first injection.

*Induction of parturition:* administer the product after the 270<sup>th</sup> day of gestation. Parturition usually takes place within 30-60 hours after treatment.

*Synchronisation of oestrus:* administer the product twice (within an interval of 11 days). Proceed with inseminations 72h and 96 h after the second injection.

*Ovarian dysfunction:* administer the product after determination of presence of the corpus luteum. Then, proceed to inseminate at the first oestrus after injection. If oestrus does not take place, conduct a further gynaecological examination, and repeat the injection 11 days after the first administration. Insemination must always be carried out 72-96 hours after injection.

*Clinical endometritis with the presence of a functional corpus luteum, pyometra:* administer one dose of the product. If necessary, repeat the treatment after 10 days.

*Mummified foetus:* Administer one dose of the product. Expulsion of the foetus is observed within 3-4 days after administration of the product.

*Induction of abortion:* administer one dose of the product in the first half of pregnancy.

*Delayed uterine involution:* administer one dose of the product and, if needed, carry out one or two further treatments (within an interval of 24 hours).

*Therapy for the treatment of ovarian cysts (9-14 days after initial administration of GnRH or analogue):* administer the product 9-14 days after verifying the positive response to treatment with GnRH or analogue.

**Sows:** 1 ml of the product / animal (equivalent to 75 µg d-cloprostenol /animal)

**Mares:** 1 ml of the product / animal (equivalent to 75 µg d-Cloprostenol /animal)

The rubber stopper of the vial can be safely punctured up to 10 times. Otherwise, for the 20 ml vials automatic syringe equipment, or a suitable draw-off needle, should be used to prevent excessive puncture of the closure.

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

At 10 times the therapeutic dose, no adverse reactions were reported. In general, a large overdose could result in the following symptoms: increased pulse and breathing rate, bronchoconstriction,

increased body temperature, increased amounts of loose faeces and urine, salivation and vomiting. As no specific antidote has been identified, in the case of overdose, symptomatic therapy is advisable. In mares, moderate sweating and soft faeces were detected when the product was administered at 3 times the therapeutic 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**

Not applicable.

### **3.12. Withdrawal periods:**

Cattle: meat and offal: zero days

milk: zero hours

Pigs: meat and offal: 1 day

Horses: meat and offal: 2 days

milk: zero hours

## **4. PHARMACOLOGICAL INFORMATION**

### **4.1. ATCvet code**

ATCvet Code: QG02AD90

### **4.2. Pharmacodynamics**

The product contains dextrorotatory cloprostenol, a synthetic analogue of the prostaglandin F<sub>2α</sub>. D-cloprostenol, the dextrorotatory enantiomer, constitutes the biologically active component of the racemic cloprostenol molecule and results in an approximate 3.58-fold increase in activity.

Administered in the luteal phase of the oestrus cycle, d-cloprostenol induces an acute decrease of luteinic receptors (LH) in the ovary, inducing regression of the corpus luteum (luteolysis) resulting in a sharp fall in progesterone levels. The increased release of follicle stimulating hormone (FSH), induces follicular maturation followed by signs of oestrus and ovulation.

### **4.3. Pharmacokinetics**

After intramuscular administration of 75 µg of d-cloprostenol to sows, the maximum concentration of d-cloprostenol in plasma was close to 2 µg/l and occurred between 30 and 80 minutes after injection. The half-life of elimination T<sub>1/2 β</sub> was estimated to be 3h 10 min.

After intramuscular administration of 150 µg of d-cloprostenol / cow, the highest plasma concentration of d-cloprostenol was found at 90 minutes after injection (approximately 1.4 µg/l). The elimination half-life was estimated to be 1h 37 min.

## **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: 3 years.

Shelf life after first opening the immediate packaging: 28 days

### **5.3. Special precautions for storage**

Do not store above 25°C

Keep the vial in the outer carton in order to protect from light

### **5.4 Nature and composition of immediate packaging**

10 ml or 20 ml amber coloured Type I glass vials, with Teflon-coated chlorobutyl rubber closures and aluminium seals with blue coloured plastic flip-offs, packaged singly in a cardboard box.

Cardboard box with 1 x 10 ml or 1 x 20 ml vials

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.

The veterinary medicinal product should not enter water courses as cloprostenol may be dangerous for fish and other aquatic organisms

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**

Date of first authorisation: DD/MM/YYYY

**9. DATE OF THE LAST REVISION OF THE SUMMARY 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.