SUMMARY OF PRODUCT CHARACTERISTICS

1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Prellim 0.075 mg/ml solution for injection for cattle and pigs

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each ml contains:

Active substance:

d-Cloprostenol (as d-Cloprostenol sodium).....0.075 mg

Excipients:

Qualitative composition of excipients and other constituents	**Quantitative composition if that information is essential for proper administration of the veterinary medicinal product**
Chlorocresol	1 mg
Ethanol (96%)	
Citric acid monohydrate	
Sodium hydroxide	
Water for injections	

Clear, colourless solution for injection, free from particles in suspension.

3. CLINICAL INFORMATION

3.1. Target species

Cattle (cows) and pigs (sows).

3.2 Indications for use for each target species

Cattle (cows)
Indications for reproduction: synchronization or induction of oestrus. Induction of parturition.
Therapeutic indication: ovarian dysfunction (persistent corpus luteum, luteal cyst), interruption of pregnancy including foetal mummification, endometritis/pyometra, delayed uterine involution.

Pigs (sows)
Indications for reproduction: Induction of parturition.

3.3 Contraindications

See section 3.7
Do not use in cases of hypersensitivity to the active substance, or to any of the excipients.
Do not use in animals with spastic respiratory or gastro-intestinal diseases.

3.4 Special warnings

None.

3.5 Special precautions for use

Special precautions for safe use in the target species

As with parenteral administration of any substance, basic antiseptic rules should be observed. The injection site must be thoroughly cleaned and disinfected in order to reduce the risk of infection with anaerobic bacteria.
Pigs: use only when precise date of insemination is known. Administer on day 113 of gestation, at the earliest. The veterinary medicinal product administered earlier, may impair the viability and weight of piglets.

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

d-Cloprostenol, like all $F_{2\alpha}$ prostaglandins, can be absorbed through the skin and can produce bronchospasm and abortion.
Direct contact with skin or mucous membranes of the user should be avoided. Pregnant women, women of child-bearing age, asthmatics and persons with bronchial problems or any other type of respiratory problem must avoid any contact or use disposable plastic gloves when administering the veterinary medicinal product.
The veterinary medicinal product must be handled carefully to avoid ACCIDENTAL SELF-INJECTION OR SKIN CONTACT.
In case of accidental self injection seek medical advice immediately and show the package leaflet or the label to the physician.
Seek medical advice immediately in case of any respiratory difficulty caused by accidental inhalation or inoculation.
In case of accidental skin contact, wash with soap and water immediately.
Do not eat, drink or smoke while handling the veterinary medicinal product.

Special precautions for the protection of the environment:
Not applicable

3.6 Adverse events

Cattle and pigs

Very rare (< 1 animal / 10,000 animals treated, including isolated reports):	Application site reaction[1] Injection site swelling[1] Injection site gaseous gangrene[1]

[1] Typical local reactions due to anaerobic infection applies in particular to cows.

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 section 16 of the package leaflet for respective contact details.

3.7 Use during pregnancy, lactation or lay

Pregnancy:
Do not use (during the whole or part of the pregnancy) unless it is desirable to induce parturition or therapeutic interruption of pregnancy.

3.8 Interaction with other medicinal products and other forms of interaction

Do not use in animals being treated with non-steroidal anti-inflammatories, as the synthesis of endogenous prostaglandins is inhibited.
The activity of other oxytocic agents can be increased after the administration of Cloprostenol.

3.9 Administration routes and dosage

For intramuscular use only:

Cattle(cows): The recommended dose is 0.150 mg d-cloprostenol/animal, equivalent to 2 ml/animal.

- **Oestrus induction** (also in cows with weak or silent heat): After determining the presence of corpus luteum (day 6-18 of the cycle), administer the veterinary medicinal product. Heat is generally observed in 48-60 hours. Inseminate 72-96 hours after this treatment. If heat is not observed, repeat after 11 days.
- **Parturition induction**: Administer the veterinary medicinal product after gestation day 270. Parturition should occur 30-60 hours post-treatment.
- **Oestrus synchronisation**: Administer the veterinary medicinal product twice (11 days apart). Inseminate artificially 72 and 96 hours after the second injection.
- **Ovarian dysfunction**: Once the presence of corpus luteum is determined, administer the veterinary medicinal product and inseminate in the first heat after the treatment. If no heat is observed, carry out a gynaecological examination again and repeat the injection 11 days after the first treatment. Insemination is 72-96 hours post-treatment.

- **Endometritis or pyometra**: Administer 1 dose of the veterinary medicinal product. Repeat the treatment 10-11 days later if necessary.
- **Gestation interruption**: Administer the veterinary medicinal product during the first half of gestation.
- **Foetal mummification**: Administer 1 dose of veterinary medicinal product. The foetus will be expelled after 3 or 4 days.
- **Retarded uterine involution**: Administer 1 dose of the veterinary medicinal product and, if indicated, repeat the treatment once or twice at 24 hours interval.

Pigs(sows): The recommended dose is 0.075 mg d-cloprostenol/animal, equivalent to 1 ml/animal.

- **Parturition induction**: Administer the veterinary medicinal product after day 112 of gestation. Repeat after 6 hours. Alternatively, 20 hours after the initial dose of d-cloprostenol, a myometrial stimulant (oxytocin or carazolol) may be administered. Following the protocol of double administration, in about 70% of cases, parturition occurs 20-30 hours after the first treatment.

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

In safety studies, at 10 times the therapeutic dose, no adverse reactions are reported.
As no specific antidote has been identified, in the case of overdose, symptomatic therapy is advisable.

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

<To be completed in accordance with national requirements after conclusion of the MRP.>

3.12 Withdrawal periods

Cows:	Meat and offal:	1 day.
	Milk:	Zero hours.
Sows:	Meat and offal:	1 day.

4. PHARMACOLOGICAL INFORMATION

4.1 ATCvet code: QG02AD90.

4.2 Pharmacodynamics

The veterinary medicinal product is based on dextrorotatory cloprostenol (d-Cloprostenol), a synthetic analogue of prostaglandin $F_{2\alpha}$.

d-Cloprostenol is the biologically active luteolytic component of cloprostenol and results in an approximately 3.5-fold increase in activity.
During the luteinizing stage of the oestrus cycle d-cloprostenol induces a rapid regression of the corpus luteum and a decrease in progesterone levels. The increased release of follicle stimulating hormone (FSH) allows a new follicle to mature, followed by oestrus and ovulation.

4.3 Pharmacokinetics

Pharmacokinetic studies demonstrate a rapid absorption of d-cloprostenol. The peak blood level is reached a few minutes following intramuscular administration, as well as a rapid diffusion to the ovaries and uterus, the organs in which the maximum concentration is reached 10-20 minutes after administration.
Following intramuscular administration of 150 micrograms of d-cloprostenol in the cow, the peak plasma level (C_{max}) of 1.4 micrograms/l is reached after approximately 90 minutes, while the elimination half life ($t_{½}$) is in the order of 1 hour 37 minutes.
In sows, a C_{max} of approximately 2 micrograms/l is observed between 30 and 80 minutes following administration of 75 micrograms d-cloprostenol, with an elimination half life in the order of 3 hours 10 minutes.

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.
Shelf life after first opening the immediate packaging: 28 days.

5.3 Special precautions for storage

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

5.4 Nature and composition of immediate packaging

Colourless type II glass vial with type I bromobutyl rubber stopper and aluminium cap.

Package size:

1 glass vial of 20 ml in a cardboard box.
5 glass vials of 20 ml in a cardboard box

Not all pack sizes may be marketed.

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

Laboratorios SYVA S.A.
C/ Marqués de la Ensenada, 16
28004 Madrid
Spain

7. MARKETING AUTHORISATION NUMBER

Vm 31592/3002

8. DATE OF FIRST AUTHORISATION

08 May 2009

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

April 2023

10. CLASIFICATION OF THE VETERINARY MEDICINAL PRODUCTS

Detailed information on this veterinary medicinal product is available in the Union Product Database.

Approved 21 April 2023