SUMMARY OF PRODUCT CHARACTERISTICS

1. NAME OF THE VETERINARY MEDICINAL PRODUCT

AT, BE, CZ, EE, ES, FR, IE, IS, IT, LT, LU, LV, NO, PL, PT, RO, SE, SI, SK, UK:
Genestran 75 micrograms/ml solution for injection for cattle, horses and pigs

DE:
Cyclosynchon 75 micrograms/ml solution for injection for cattle, horses and pigs

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each ml contains:

**Active substance:** micrograms
R(+) - cloprostenol (as R(+) - cloprostenol sodium) 75

**Excipients:**
Chlorocresol (as preservative) 1000

For a full list of excipients, see section 6.1

3. PHARMACEUTICAL FORM

Solution for injection
Clear and odourless

4. CLINICAL PARTICULARS

4.1 Target species

Cattle, horses and pigs.

4.2 Indications for use, specifying the target species

**Cattle:**
- induction of luteolysis allowing resumption of oestrus and ovulation in cyclic females when used during dioestrus
- synchronisation of oestrus (within 2 to 5 days) in groups of cyclic females treated simultaneously
- treatment of suboestrus and uterine disorders related to a functioning or persistent corpus luteum (endometritis, pyometra)
- treatment of ovarian luteal cysts
- induction of abortion until day 150 of pregnancy
- expulsion of mummified foetuses
- induction of parturition (within the last two weeks of gestation).

**Horses:**
- induction of luteolysis in mares with a functional corpus luteum.
Pigs:
- induction or synchronisation of farrowing (generally within 24 to 36 hours) from day 113 of pregnancy onwards (day 1 of pregnancy is the last day of natural or artificial insemination).

4.3 Contraindications

Do not use in case of hypersensitivity to the active substance or to any of the excipients.
Do not use in animals with spastic respiratory or gastro-intestinal diseases.
Do not use in pregnant animals, for which induction of abortion or parturition is not intended.

4.4 Special warnings for each target species

None.

4.5 Special precautions for use

i. Special precautions for use in animals

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 application.
Avoid contamination of the product during use. Should any apparent growth or discoloration occur, the product should be discarded.

Pigs: use only when precise date of insemination is known. Administer on day 113 of gestation, at the earliest. Genestran administered earlier, may impair the viability and weight of piglets.

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

Direct contact with skin or mucous membranes of the user should be avoided. Prostaglandins of the F₂α type may be absorbed through the skin and may cause bronchospasm or miscarriage. Care should be taken when handling the product to avoid self-injection or skin contact. Pregnant women, women of childbearing age, asthmatics and persons with other respiratory tract diseases should exercise caution when handling cloprostenol. Those persons should wear gloves during administration of the product. Accidental spillage on the skin should be washed immediately with soap and water. In case of accidental self-injection, seek medical advice immediately and show the package leaflet or the label to the physician.

4.6 Adverse reactions (frequency and seriousness)

Cattle:
Following induction of parturition with Genestran, an increased incidence of placental retention may be observed.
**Horses:**
After an injection of Genestran, slight sweating and diarrhoea may develop temporarily.

**Pigs:**
No undesirable effects have been reported.

4.7 **Use during pregnancy, lactation or lay**

**Pregnancy:**
Do not use in pregnant animals, for which induction of abortion or parturition is not intended.

**Lactation:**
Can be used during lactation.

4.8 **Interaction with other medicinal products and other forms of interaction**

None known.

4.9 **Amounts to be administered and administration route**

**Cattle:**
2.0 ml intramuscularly (150 μg).
Induction of oestrus: two days following administration, close observation of the oestrus is advised.
Synchronisation of oestrus: animals are to be treated twice within 11 days.

**Horses:**
0.3 - 0.5 ml intramuscularly (22.5 - 37.5 μg)
Intended for single use.

**Pigs:**
0.7 - 1.0 ml intramuscularly (52.5 - 75 μg)
Intended for single use.

The stopper should not be pierced more than 70 times.

4.10 **Overdose (symptoms, emergency procedures, antidotes), if necessary**

No specific antidote exists for R(+)-cloprostenol. For cattle and pigs no cases of over-dosage have been recorded. An overdose of R(+)-cloprostenol in the horse may lead to transient diarrhoea, increased sweating around the neck and slight decrease in body temperature.

4.11 **Withdrawal period(s)**

Meat and offal: cattle, pigs and horses: 1 day
Milk: cattle: zero hours
5. **PHARMAOCOLOGICAL or IMMUNOLOGICAL PROPERTIES**

R(+) - cloprostenol is a synthetic prostaglandin belonging to the genito urinary system and sex hormones.

**ATCvet code:** QG02AD90

5.1 **Pharmacodynamic properties**

Genestran contains the active substance R(+) - cloprostenol, the biologically active component of the synthetic prostaglandin cloprostenol which acts similarly to the naturally occurring endogenous PGF\(_{2\alpha}\). Since Genestran contains only the biologically active component R(+) - cloprostenol, low doses are sufficient to produce luteolytic and/or stimulatory effects on the myometrium.

5.2 **Pharmacokinetic particulars**

Cloprostenol is reabsorbed rapidly. As demonstrated in cattle, highest plasma concentrations (T\(_{\text{max}}\)) are reached within one hour and decline with a t\(_{1/2}\) of between 40 to 80 minutes. Elimination occurs in the urine and faeces.

6. **PHARMACEUTICAL PARTICULARS**

6.1 **List of excipients**

Chlorocresol  
Citric acid monohydrate  
Sodium hydroxide (for pH adjustment)  
Water for Injections

6.2 **Incompatibilities**

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

6.3 **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.

6.4 **Special precautions for storage**

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

6.5 **Nature and composition of immediate packaging**

Colourless vials of type I glass containing 20 ml or 50 ml of solution for injection, with chlorobutyl rubber stoppers and aluminium caps.

**Presentations:**  
Cardboard box of 1 vial of 20 ml or 50 ml
Cardboard box of 5 vials of 20 ml

Not all pack sizes may be marketed.

6.6 **Special precautions for the disposal of unused veterinary medicinal product or waste materials**

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**

aniMedica GmbH
Im Südfeld 9
48308 Senden-Bösensell
Germany

8. **MARKETING AUTHORISATION NUMBER**

Vm 24745/4010

9. **DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORIZATION**

Date: 27 November 2008

10. **DATE OF REVISION OF THE TEXT**

Date: September 2013

Approved: 17/09/2013