

# Summary of Product Characteristics

## 1 NAME OF THE VETERINARY MEDICINAL PRODUCT

Prid delta 1.55 g vaginal delivery system for cattle

## 2 QUALITATIVE AND QUANTITATIVE COMPOSITION

Each delivery system contains:

### Active substance:

1.55 g of progesterone

### Excipients:

For the full list of excipients, see section 6.1

## 3 PHARMACEUTICAL FORM

Vaginal delivery system.

Whitish triangular device with a tail.

## 4 CLINICAL PARTICULARS

### 4.1 Target Species

Cattle: cows and heifers.

### 4.2 Indications for use, specifying the target species

For the control of the oestrus cycle in cows and heifers including:

- Synchronisation of oestrus including fixed time artificial insemination (FTAI) protocols.
- Synchronisation of oestrus of donor and recipient animals for embryo transfer. To be used in combination with a prostaglandin (PGF<sub>2α</sub> or analogue)
- Induction and synchronisation of oestrus in cycling and non cycling cattle including fixed time artificial insemination (FTAI) protocols.
- In cycling cattle. To be used in combination with prostaglandin (PGF<sub>2α</sub>) or analogue.
- In cycling and non-cycling cattle. To be used in combination with gonadotropin releasing hormone (GnRH) or analogue and PGF<sub>2α</sub> or analogue.
- In non-cycling cattle. To be used in combination with PGF<sub>2α</sub> or analogue and equine chorionic gonadotrophin (eCG).

### 4.3 Contraindications

Do not use in sexually immature heifers or females with abnormal genital tracts e.g. freemartins.

Do not use before 35 days have passed since previous calving.

Do not use in animals suffering from infectious or non-infectious disease of the genital tract.

Do not use in pregnant animals. See section 4.7.

### 4.4 Special warnings for each target species

The percentage of cows displaying oestrus within a given period following treatment is usually greater than in untreated cows and the subsequent luteal phase is of normal duration. However, the progesterone treatment alone, according to dosage regimen proposed, is not sufficient to induce oestrus and ovulation in all cycling females.

In order to optimise the protocol, it is advisable to determine cycling ovarian activity before using the progesterone treatment. Animals in poor condition, whether from illness, inadequate nutrition, under unnecessary stress or other factors, may respond poorly to treatment.

#### 4.5 Special precautions for use

##### Special precautions for use in animals

It is recommended to wait a minimum of 35 days following parturition before starting the treatment with this product.

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

Gloves must be worn when handling the veterinary medicinal product both during insertion and removal.

Do not eat or drink when handling the veterinary medicinal product.

Wash hands after use.

#### 4.6 Adverse reactions (frequency and seriousness)

During the course of the seven day treatment, the device may induce a mild local reaction (i.e. inflammation of the vaginal wall). A clinical study carried out with 319 cows and heifers has demonstrated that 25% of animals presented rosy or cloudy vulvar secretions at the device removal. This local reaction disappears rapidly without any treatment between removal and insemination and does not affect fertility at inseminations nor pregnancy rates.

The frequency of adverse reactions is defined using the following convention:

- very common (more than 1 in 10 animals treated displaying adverse reaction(s))
- common (more than 1 but less than 10 animals in 100 animals treated)
- uncommon (more than 1 but less than 10 animals in 1,000 animals treated)
- rare (more than 1 but less than 10 animals in 10,000 animals treated)
- very rare (less than 1 animal in 10,000 animals treated, including isolated reports).

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

Can be used during lactation.

Do not use before 35 days have passed since previous calving.

Laboratory studies in rat and rabbit, after intramuscular or subcutaneous administrations, and at repeated high doses of progesterone, have produced evidence of foetotoxic effects. The use of the product is contra indicated in pregnant cattle.

#### 4.8 Interaction with other medicinal products and other forms of interactions

None known.

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

Vaginal use.

1.55 g of progesterone / animal for 7 days.

Judgment on the protocol to be used should be made by the veterinarian responsible for treatment, on the basis of the treatment objectives of the individual herd or cow. The following protocols could be used.

##### **For synchronisation of oestrus (including synchronisation of oestrus of donor and recipients animal for embryo transfer)**

- Insert the device for 7 days.
- Inject a prostaglandin (PGF<sub>2</sub>α) or analogue 24 hours prior to device removal
- Removal of the device
- In animals that respond to treatment the onset of oestrus generally occurs within 1-3 days after removal of the device. Cows should be inseminated within 12 hours of first observed oestrus.

##### **For the induction and synchronisation of oestrus for Fixed Time Artificial Insemination (FTAI)**

The following FTAI protocols have been commonly reported in the literature:

In cycling cattle:

- Insert the device for 7 days.
- Inject a prostaglandin (PGF<sub>2</sub>α) or analogue 24 hours prior to device removal
- Removal of the device
- Animals should be inseminated 56 hours after removal of the device.

In cycling and non-cycling cattle (including recipient cows):

- Insert the device for 7 days.
- Inject GnRH or analogue at the device insertion.
- Inject a prostaglandin (PGF<sub>2</sub>α) or analogue 24 hours prior to device removal
- Animals should be inseminated 56 hours after removal of the device, or
- Inject GnRH or analogue 36 hours after device removal and FTAI 16 to 20 hours later.

Or in alternative,

- Insert the device for 7 days.
- Inject GnRH or analogue at the device insertion
- At device removal inject prostaglandin (PGF<sub>2</sub>α) or analogue
- Inject GnRH or analogue 56 hours after removal of the device
- Animals should be inseminated 16 to 20 hours later

In non-cycling cattle:

- Insert the device for 7 days.
- Inject a prostaglandin (PGF<sub>2</sub>α) or analogue 24 hours prior to device removal
- Inject eCG at the time of the device removal
- Animals should be inseminated 56 hours after removal of the device.

#### **Device application information:**

Using an applicator, insert one device into the vagina of the animal. The intravaginal device should stay in place for 7 days. The device is intended for single use only.

Applicator method of use and Insertion:

A device applicator should be used for administration, following the procedure described below:

1. Clean and disinfect the applicator in a non-irritant antiseptic solution before use.
2. Fold the device and load into the applicator. The end of the device tail should be outside of the applicator. Care should be taken to avoid unnecessary or prolonged handling of the product to minimise transfer of the active substance to the operator's gloves.
3. Apply a small quantity of obstetrical lubricant to the end of the loaded applicator.
4. Lift the tail and clean the vulva and perineum.
5. Gently insert the applicator into the vagina, first in a vertical direction and then horizontally until some resistance is encountered.
6. Make sure the removal tail is free, press the handle of the applicator and pull it out, leaving the removal tail hanging from the vulva.
7. Clean and disinfect the applicator after use and before use on another animal.

Removal:

Remove 7 days after insertion by gently pulling on the removal tail. On occasions the tail may not be visible from the outside of the animal, in such cases it may be located in the posterior vagina using a gloved finger. Withdrawal of the device should not require force. If any resistance is encountered a gloved hand should be used to ease removal.

If there is any difficulty in removal from the animal beyond that itemised above veterinary advice must be sought.

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

Not applicable.

#### **4.11 Withdrawal period(s)**

Meat and offal: zero days

Milk: zero days

## 5 PHARMACOLOGICAL or IMMUNOLOGICAL PROPERTIES

Pharmacotherapeutic group: Sex hormones (progestogens).

ATC Vet code: QG03DA04.

### 5.1 Pharmacodynamic properties

Progesterone interacts with specific intranuclear receptors and binds to specific DNA sequence on the genome and then, initiates transcription of a specific set of genes which is ultimately responsible for the translation of hormonal action into physiological events. Progesterone has a negative feedback action on the hypothalamo-pituitary axis, primarily on GnRH and consequently on LH secretion. Progesterone prevents the hormonal surge from hypophysis (FSH and LH) and so suppresses oestrus and ovulation. At removal progesterone falls dramatically in 1 hour allowing follicular maturation, oestrus and ovulation in a narrow window.

### 5.2 Pharmacokinetic particulars

Progesterone is rapidly absorbed by intravaginal route. Circulating progesterone is bound to proteins in blood. Progesterone binds to corticosteroid-binding globulin (CBG) and to albumin. Progesterone is accumulated in fatty tissue due to its lipophilic properties, and in tissues/organs containing progesterone receptors. Liver is the main site of progesterone metabolism. Progesterone has a half-life of 3 hours, a C<sub>max</sub> of 5µg/L and a T<sub>max</sub> of 9h. The principal route of excretion is the faeces and the secondary route is the urine.

## 6 PHARMACEUTICAL PARTICULARS

### 6.1 List of excipients

EthylVinylAcetate

Polyamide

Plastic tail

### 6.2 Major incompatibilities

None known.

### 6.3 Shelf-life

Shelf-life of the veterinary medicinal product as packaged for sale: 3 years.

Shelf-life after first opening the immediate sachet: 6 months.

### 6.4 Special precautions for storage

This veterinary medicinal product does not require any special storage conditions.

### 6.5 Nature and composition of immediate packaging

#### Material of the primary container

Polyester/ aluminium/ polyethylene rectangular sachet.

#### Pack sizes

Cardboard box containing 10 sachets of 1 device

Cardboard box containing 25 sachets of 1 device

Cardboard box containing 1 applicator and 25 sachets of 1 device

Cardboard box containing 50 sachets of 1 device

Cardboard box containing 100 sachets of 1 device

Cardboard box containing 1 applicator and 50 sachets of 1 device

Polyethylene box containing 50 sachets of 1 device

Polyethylene box containing 1 applicator and 50 sachets of 1 device

Sachet containing 10 devices

Not all pack sizes may be marketed.

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

Any unused veterinary medicinal product or waste materials derived from such veterinary medicinal products should be disposed of in accordance with local requirements.

#### **7 MARKETING AUTHORISATION HOLDER**

Ceva Santé Animale  
10, avenue de La Ballastière  
33500 Libourne  
France

#### **8 MARKETING AUTHORISATION NUMBER(S)**

VPA10815/013/001

#### **9 DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION**

Date of first authorisation: 10 December 2010  
Date of last renewal: 29 May 2015

#### **10 DATE OF REVISION OF THE TEXT**

February 2017