[Version 9,03/2022] corr. 11/2022

ANNEX I

SUMMARY OF PRODUCT CHARACTERISTICS

1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Cepravin Dry Cow 250 mg intramammary suspension for cattle (dairy cow at drying-off)

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each 3 g syringe contains:

Active substance:

Cefalonium (as cefalonium dihydrate) 250 mg

Excipients:

Qualitative composition of excipients and other constituents
Aluminium distearate
Liquid paraffin

White to cream coloured suspension.

3. CLINICAL INFORMATION

3.1 Target species

Cattle (dairy cow at drying-off)

3.2 Indications for use for each target species

For the treatment of subclinical mastitis at drying-off and the prevention of new bacterial infections of the udder caused by *Staphylococcus aureus*, *Streptococcus agalactiae*, *Streptococcus dysgalactiae*, *Streptococcus uberis*, *Trueperella pyogenes*, *Escherichia coli* and *Klebsiella* spp. during the non-lactating period of cows.

3.3 Contraindications

Do not use in animals known to be hypersensitive to cephalosporin antibiotics and other β-lactam antibiotics.
Not to be used in lactating cows.

3.4 Special warnings

None.

3.5 Special precautions for use

Special precautions for safe use in the target species:

Use of the veterinary medicinal product should be based on susceptibility testing of bacteria isolated from milk samples from the animal. If this is not possible, therapy should be based on local (regional, farm level) epidemiological information about susceptibility of target bacteria. Use of the veterinary medicinal product deviating from the instructions given in the SPC may increase the prevalence of bacteria resistant to cefalonium and may decrease the effectiveness of treatment with other beta lactams. Dry cow therapy protocols should take local and national policies on antimicrobial use into consideration, and undergo regular veterinary review.

The feeding to calves of milk containing residues of cefalonium that could select for antimicrobial-resistant bacteria (e.g. production of beta-lactamases) should be avoided up to the end of the milk withdrawal period, except during the colostral phase.
The efficacy of the veterinary medicinal product is only established against the pathogens mentioned in Section 3.2.Consequently, serious acute mastitis (potentially fatal) due to other pathogen species, particularly *Pseudomonas aeruginosa*, can occur after drying off. Good hygienic practices should be thoroughly respected in order to reduce this risk.

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

Wash hands after use.
Penicillin and cephalosporins may cause sensitisation (allergy) following injection, inhalation, ingestion or skin contact. Sensitivity to penicillin may lead to cross-sensitivity to cephalosporin and vice versa. Allergic reactions to these substances may occasionally be serious.
Do not handle this veterinary medicinal product if you know you are sensitised, or if you have been advised not to work with such preparations.
Handle this veterinary medicinal product with great care to avoid exposure, taking all recommended precautions.
If you develop symptoms following exposure such as a skin rash you should seek medical advice and show the package leaflet or the label to the physician. Swelling of the face, lips or eyes or breathing difficulties are more serious symptoms and require urgent medical attention.

Special precautions for the protection of the environment:

Not applicable.

3.6 Adverse events

Cattle (dairy cow at drying-off):

None known.

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:
Intended for use during the last trimester of pregnancy once the lactating cow has been dried off.
There is no adverse treatment effect on the foetus.
Not to be used in lactating cows.

3.8 Interaction with other medicinal products and other forms of interaction

None known.

3.9 Administration routes and dosage

Intramammary use.
The content of one syringe should be infused into the teat canal of each quarter immediately after the last milking of the lactation. Before infusion, the teat should be thoroughly cleaned and disinfected with the cleaning towel provided.
Avoid contamination of the nozzle after removing the cap. Do not bend the nozzle.

Option 1: For short nozzle intramammary administration: hold the barrel of the syringe and the base of the cap in one hand and twist off the small upper part of the cap above the indent mark (the base portion of the cap remains on the syringe). Take care not to contaminate the short exposed part of the nozzle.
Option 2: For full nozzle intramammary administration: remove the cap fully by holding the barrel of the syringe firmly in one hand and with the thumb push up and along the length of the cap until the cap clicks off. Take care not to contaminate the nozzle.
Insert the nozzle into the teat canal and apply steady pressure on the syringe plunger until the full dose has been delivered. Holding the end of the teat with one hand, gently massage upwards with the other to aid dispersion of the antibiotic into the quarter.
Finally immerse the teats in a teat dip.

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

Repeated doses in cattle on three consecutive days did not demonstrate or produce any adverse effects.

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

Meat and offal: 21 days
Milk:

Interval treatment-calving ≥ 54 days: withdrawal period = 96 hours after calving.
Interval treatment-calving < 54 days: withdrawal period = 54 days plus 96 hours after treatment, ensuring that at least 7 complete milkings are discarded.

4. PHARMACOLOGICAL INFORMATION

4.1 ATCvet code: QJ51DB90

4.2 Pharmacodynamics

Cefalonium is an antibacterial drug of the first generation cephalosporin group which acts by inhibition of cell wall synthesis (bactericidal mode of action).
Three mechanisms of resistance to cephalosporin are known: reduced permeability of the cell wall, enzymatic inactivation and absence of specific penicillin binding sites. In Gram-positive bacteria and particularly staphylococci, the main cephalosporin resistance mechanism is through alteration of penicillin binding proteins. In Gram-negative bacteria resistance may consist in the production of (broad- or extended-spectrum) β-lactamases.
Cefalonium is active against: *Staphylococcus aureus*, *Streptococcus agalactiae*, *Streptococcus dysgalactiae*, *Streptococcus uberis*, *Trueperella pyogenes*, *Escherichia coli* and *Klebsiella* spp.

4.3 Pharmacokinetics

Cefalonium is extensively but slowly absorbed from the udder and excreted primarily in the urine. Between 7 and 13% of the active substance is eliminated in urine on each of the first three days post dosing whilst daily excretion in faeces is < 1% over the same period.
Mean blood concentration remains fairly constant during approximately 10 days after dosing which is consistent with slow but prolonged absorption of cefalonium from the udder.

The long term persistence of cefalonium in the dry udder was examined over a time span of 10 weeks after infusion. Effective levels of cefalonium in udder secreta remained up to 10 weeks after infusion.

5. PHARMACEUTICAL PARTICULARS

5.1 Major incompatibilities

Not applicable.

5.2 Shelf life

Shelf life of the veterinary medicinal product as packaged for sale: 3 years
Shelf life after first opening of the immediate packaging: use immediately

5.3 Special precautions for storage

Do not store above 30 °C.
Do not freeze.

5.4 Nature and composition of immediate packaging

Single dose 3g white polyethylene syringes with a red polyethylene dual push-fit cap.
Boxes of 20 intramammary syringes with cleaning towels.
Bucket of 144 intramammary syringes with cleaning towels.

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

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 OF THE PRODUCT CHARACTERISTICS

{DD/MM/YYYY}

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

CARTON or BUCKET

1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Cepravin Dry Cow 250 mg intramammary suspension

2. STATEMENT OF ACTIVE SUBSTANCES

250 mg Cefalonium (as cefalonium dihydrate)/syringe

3. PACKAGE SIZE

20 intramammary syringes with cleaning towels.
144 intramammary syringes with cleaning towels.

4. TARGET SPECIES

Cattle (dairy cow at drying off)

5. INDICATIONS

6. ROUTES OF ADMINISTRATION

Intramammary use.

7. WITHDRAWAL PERIODS

Withdrawal period:
Meat and offal: 21 days
Milk:
Interval treatment-calving ≥ 54 days: withdrawal period = 96 hours after calving.
Interval treatment-calving < 54 days: withdrawal period = 54 days plus 96 hours after treatment, ensuring that at least 7 complete milkings are discarded

8. EXPIRY DATE

Exp. {mm/yyyy}

9. SPECIAL STORAGE PRECAUTIONS

Do not store above 30°C.
Do not freeze.

10. THE WORDS “READ THE PACKAGE LEAFLET BEFORE USE”

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

SYRINGE LABEL

1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Cepravin Dry Cow

2. QUANTITATIVE PARTICULARS OF THE ACTIVE SUBSTANCES

250 mg Cefalonium (as cefalonium dihydrate)/syringe

3. BATCH NUMBER

Lot {number}

4. EXPIRY DATE

Exp. {mm/yyyy}

B. PACKAGE LEAFLET

PACKAGE LEAFLET

1. Name of the veterinary medicinal product

Cepravin Dry Cow 250 mg intramammary suspension for cattle (dairy cow at drying-off)

2. Composition

Each 3 g syringe contains:

Active substance:
Cefalonium (as cefalonium dihydrate) 250 mg

White to cream coloured suspension.

3. Target species

Cattle (dairy cow at drying-off)

4. Indications for use

For the treatment of subclinical mastitis at drying-off and the prevention of new bacterial infections of the udder caused by *Staphylococcus aureus*, *Streptococcus agalactiae*, *Streptococcus dysgalactiae*, *Streptococcus uberis*, *Trueperella pyogenes*, *Escherichia coli* and *Klebsiella* spp. during the non-lactating period of cows.

5. Contraindications

Do not use in animals known to be hypersensitive to cephalosporin antibiotics and other β-lactam antibiotics.
Not to be used in lactating cows.

6. Special warnings

Special precautions for safe use in the target species:

Use of the veterinary medicinal product should be based on susceptibility testing of bacteria isolated from milk samples from the animal. If this is not possible, therapy should be based on local (regional, farm level) epidemiological information about susceptibility of target bacteria. Use of the veterinary medicinal product deviating from the instructions given in the SPC may increase the prevalence of bacteria resistant to cefalonium and may decrease the effectiveness of treatment with other beta lactams. Dry cow therapy protocols should take local and national policies on antimicrobial use into consideration, and undergo regular veterinary review.
The feeding to calves of milk containing residues of cefalonium that could select for antimicrobial-resistant bacteria (e.g. production of beta-lactamases) should be avoided up to the end of the milk withdrawal period, except during the colostral phase.
The efficacy of the veterinary medicinal product is only established against the pathogens mentioned in Section “Indications for use”. Consequently, serious acute mastitis (potentially fatal) due to other pathogen species, particularly *Pseudomonas aeruginosa*, can occur after drying off. Good hygienic practices should be thoroughly respected in order to reduce this risk.

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

Wash hands after use.
Penicillin and cephalosporins may cause sensitisation (allergy) following injection, inhalation, ingestion or skin contact. Sensitivity to penicillin may lead to cross-sensitivity to cephalosporin and vice versa. Allergic reactions to these substances may occasionally be serious.
Do not handle this veterinary medicinal product if you know you are sensitised, or if you have been advised not to work with such preparations.
Handle this veterinary medicinal product with great care to avoid exposure, taking all recommended precautions.
If you develop symptoms following exposure such as a skin rash you should seek medical advice and show the package leaflet or the label to the physician. Swelling of the face, lips or eyes or breathing difficulties are more serious symptoms and require urgent medical attention.

Pregnancy and lactation:

Intended for use during the last trimester of pregnancy once the lactating cow has been dried off.
There is no adverse treatment effect on the foetus.
Not to be used in lactating cows.

Overdose:

Repeated doses in cattle on three consecutive days did not demonstrate or produce any adverse effects.

Special restrictions for use and special conditions for use:
Not applicable.

7. Adverse events

Cattle (dairy cow at drying-off):

None known.

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.

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

Intramammary use.

The content of one syringe should be infused into the teat canal of each quarter immediately after the last milking of the lactation.

9. Advice on correct administration

Before infusion, the teat should be thoroughly cleaned and disinfected with the cleaning towel provided. Avoid contamination of the nozzle after removing the cap. Do not bend the nozzle.

Option 1: For short nozzle intramammary administration hold the barrel of the syringe and the base of the cap in one hand and twist off the small upper part of the cap above the indent mark (the base portion of the cap remains on the syringe). Take care not to contaminate the short exposed part of the nozzle.
Option 2: For full nozzle intramammary administration remove the cap fully by holding the barrel of the syringe firmly in one hand and with the thumb push up and along the length of the cap until the cap clicks off. Take care not to contaminate the nozzle.
Insert the nozzle into the teat canal and apply steady pressure on the syringe plunger until the full dose has been delivered. Holding the end of the teat with one hand, gently massage upwards with the other to aid dispersion of the antibiotic into the quarter.
Finally immerse the teats in a teat dip.

10. Withdrawal periods

Meat and offal: 21 days
Milk:
Interval treatment-calving ≥ 54 days: withdrawal period = 96 hours after calving.
Interval treatment-calving < 54 days: withdrawal period = 54 days plus 96 hours after treatment, ensuring that at least 7 complete milkings are discarded.

11. Special storage precautions

Keep out of the sight and reach of children.
Do not store above 30 °C.
Do not freeze.
Do not use this veterinary medicinal product after the expiry date which is stated on the label/carton. The expiry date refers to the last day of that month.

Shelf life of the veterinary medicinal product as packaged for sale: 3 years
Shelf life after first opening of the immediate packaging: use immediately

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

Package sizes:
20 intramammary syringes with 3 g suspension and cleaning towels.
144 intramammary syringes with 3 g suspension and cleaning towels.

Not all pack sizes may be marketed.

15. Date on which the package leaflet was last revised

{DD/MM/YYYY}

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:

TriRx Segré
La Grindolière
Zone Artisanale
Segré
49500 Segré-en-Anjou Bleu
France

Intervet International GmbH
Feldstrasse 1a
85716 Unterschleissheim
Germany

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.