

*[Version 8.2,01/2021]*

**ANNEX I**  
**SUMMARY OF PRODUCT CHARACTERISTICS**

## 1. NAME OF THE VETERINARY MEDICINAL PRODUCT

OCUREV Lyophilisate and solvent for suspension

## 2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each dose (1 drop – approx. 35 µl) of the reconstituted vaccine contains:

### Active substance:

Live attenuated *Brucella melitensis*, strain Rev-1 (smooth phase) ..... 1 – 2 x10<sup>9</sup> cfu\*

\* cfu: colony forming units

### Excipient(s):

Patent Blue V (E-131) ..... 0.1 mg/ml

For a full list of excipients, see section 6.1.

## 3. PHARMACEUTICAL FORM

Lyophilisate and solvent for suspension.

## 4. CLINICAL PARTICULARS

### 4.1 Target species

Sheep and goats (replacement).

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

For active immunisation of sheep and goats to reduce infection and clinical signs caused by *Brucella melitensis*.

### 4.3 Contraindications

Do not vaccinate females in the pregnancy/lactation period (see item 4.7).

### 4.4 Special warnings for each target species

The vaccine is only used in replacement flocks.  
Vaccinate healthy animals only.

### 4.5 Special precautions for use

#### Special precautions for use in animals

Application should be done under strict veterinary control and comply with the established requirements of the legislation in force. The measures to be adopted for the vaccinated animals and their waste materials, in accordance with the legislation in force, as well as other safety measures that official authorities determine should be taken into account.

The risk of vaccinated animals transmitting the vaccine strain to other stock living with them is practically negligible. Therefore, if non vaccinated animals (including cattle) have contact with the

vaccine strain from animals vaccinated with this speciality, they could give positive results in the serological tests. To prevent this possibility, it is advisable that vaccination is done, ideally, in an area different from the one used to house the bulk of the herd and that the vaccinated animals are kept segregated during two weeks from vaccination, as during this period the excretion of the vaccine strain can be produced through the body fluids (nasal cavities and conjunctiva).

Special warning: The microorganism is detectable at 15 days after vaccination in some organs. Taking into account that there could be a potential persistence in cranial lymph nodes for longer time, vaccinated animals should not be slaughtered in the period of 3 months after vaccination. Just in case they should be slaughtered, they will be subjected to the procedures applicable to the animals considered positive to Brucellosis, and the official veterinary documents that legislation in force requires will be necessary.

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

The vaccine can be pathogenic for humans. Since this vaccine has been prepared with a live, attenuated microorganism, appropriate measures must be taken to prevent contamination of the handler and other people that collaborate in the process. If accidental contamination during handling of the vaccine were to occur, seek medical advice immediately and show the package insert to the doctor.

It should not be administered by pregnant women.

During the administration of the product, the person or people who carry it out should be protected with glasses, gloves and mask, hold tightly the head of the animal to avoid sudden movements, and perform it in a safe-guard place in order to protect themselves from gusts of wind. The contact of the glove with the mucous and/or open wounds during and after administration should be avoided.

It should be also taken into account that the period of excretion of the vaccine strain through the body fluids of the vaccinated animals can last until 2 weeks after administration.

Do not smoke, drink nor eat during the administration.

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

Hypersensitivity reactions may occur. This event is very rare. Should this be the case, an appropriate antihistaminic therapy must be administered.

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**

Do not use during the whole pregnancy and lactation.

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

No information is available on the safety and efficacy of this vaccine when used with any other veterinary medicinal product. A decision to use this vaccine before or after any other veterinary medicinal product therefore needs to be made on a case by case basis.

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

Dose: 1 drop (approx. 35 µl) per ocular use to sheep and goats from 3 to 6 months of age.

Maintain usual aseptic conditions.

Reconstitute the vaccine with the coloured solvent, wait some minutes and shake gently to prevent foaming. Carefully remove seal and stopper and place the dropper on the vial mouth. Dispense only 1 drop in the eye of the animal. If there is no warranty that the drop has been deposited correctly, the procedure can be repeated in the other eye.

The vaccine should be administered within 6 hours after reconstitution.

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

With a ten fold dose it was observed a slight hyperthermia at 4 hours.

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

30 days (see 4.5).

### **5. IMMUNOLOGICAL PROPERTIES**

Pharmacotherapeutic group: Live bacterial vaccines for sheep and goats.

ATC vet code: QI04AE/QI03AE.

Rev-1 is an attenuated, smooth strain of *B. melitensis*, streptomycin non-dependent, isolated from streptomycin dependent cells, which was obtained from the virulent strain 6056.

The vaccine organism is streptomycin resistant.

The Rev-1 strain has the following characteristics:

- It stimulates active immunity and induces cell immune response against *Brucella* infections.
- Conjunctival administration induces a weak and short-lasting serological response that avoids the interference with the conventional brucellosis serological tests 4 months after vaccination.

### **6. PHARMACEUTICAL PARTICULARS**

#### **6.1 List of excipients**

##### Lyophilisate

Tryptone

Sucrose

Thiourea

Ascorbic acid

Sodium glutamate

Highly purified water

##### Solvent

Sodium chloride

Patent Blue V (E-131)

Highly purified water

## **6.2 Major 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:

2 years for 10 and 50 doses vials.

1 year for 25 doses vials.

Shelf-life after reconstitution according to directions: 6 hours.

## **6.4. Special precautions for storage**

Store and transport refrigerated (2 °C – 8 °C).

Protect from light.

Do not freeze.

May be transported and stored up to a maximum of 37°C for a period not longer than 7 days.

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

The material of the container is as follows:

### Lyophilisate

- 11 cc, Type I neutral glass vial (pack sizes of 10, 25 and 50 doses).

- Type I vacuum closing, butyl rubber stopper.

- Aluminium seal.

### Solvent

- 3 cc, Type I neutral glass vial containing 0.5 ml (10 doses), 1 ml (25 doses) or 2 ml (50 doses).

- Type I insulin butyl rubber stopper.

- Type insulin aluminium seal.

- Sterile PVC dropper adjustable to the vial.

Pack sizes:

1 cardboard box with 1 vial of 10 doses, 1 vial of 0.5 ml of solvent and one dropper.

1 cardboard box with 1 vial of 25 doses, 1 vial of 1 ml of solvent and one dropper.

1 cardboard box with 1 vial of 50 doses, 1 vial of 2 ml of solvent and one dropper.

Not all pack sizes may be marketed.

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

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**

CZ Vaccines S.A.U.

A Relva s/n – Torneiros

36410 O Porriño

Pontevedra

Spain

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

Spain: 1481 ESP

Portugal: R744DGV

France: FR/V/1723018 6/2017

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

Date of first authorization: 20/11/2002

Date of last renewal:

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

**PROHIBITION OF SALE, SUPPLY AND/OR USE>**

Not applicable.

Veterinary medicinal product subject to prescription.

Veterinary use.

Administration under control or supervision of a veterinary surgeon.

**ANNEX III**  
**LABELLING AND PACKAGE LEAFLET**

## **A. LABELLING**

**PARTICULARS TO APPEAR ON THE OUTER PACKAGE**

{NATURE/TYPE}

**1. NAME OF THE VETERINARY MEDICINAL PRODUCT**

OCUREV Lyophilisate and solvent for suspension

**2. STATEMENT OF ACTIVE SUBSTANCES**

Each dose (1 drop-approx. 35 µl) of the reconstituted vaccine contains:

Live attenuated *Brucella melitensis*, strain Rev-1 (smooth phase) ..... 1 – 2 x10<sup>9</sup> cfu  
Patent Blue V (E-131) ..... 0.1 mg/ml

**3. PHARMACEUTICAL FORM**

Lyophilisate and solvent for suspension

**4. PACKAGE SIZE**

10 doses  
25 doses  
50 doses

**5. TARGET SPECIES**

Sheep and goats (replacement)

**6. INDICATION(S)**

For active immunisation of sheep and goats to reduce infection and clinical signs caused by *Brucella melitensis*

**7. METHOD AND ROUTE(S) OF ADMINISTRATION**

Ocular use. Administer 1 drop (1 dose) in the eye of the animal  
Read the package leaflet before use

**8. WITHDRAWAL PERIOD(S)**

Withdrawal period: 30 days

**9. SPECIAL WARNING(S), IF NECESSARY**

Do not administer to females in the pregnancy/lactation period

Accidental administration or contact with the mucosa is dangerous – see package leaflet before use

**10. EXPIRY DATE**

EXP {month/year}

Once reconstituted, the vaccine should be used within 6 hours

**11. SPECIAL STORAGE CONDITIONS**

Store and transport at 2-8°C

Protect from light

Do not freeze

May be transported and stored up to a maximum of 37°C for a period not longer than 7 days

**12. SPECIAL PRECAUTIONS FOR THE DISPOSAL OF UNUSED PRODUCTS OR WASTE MATERIALS, IF ANY**

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

**13. THE WORDS “FOR ANIMAL TREATMENT ONLY” AND CONDITIONS OR RESTRICTIONS REGARDING SUPPLY AND USE, IF APPLICABLE**

For animal treatment only

To be supplied only on veterinary prescription

**14. THE WORDS “KEEP OUT OF THE SIGHT AND REACH OF CHILDREN”**

Keep out of the sight and reach of children.

**15. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER**

**CZ Vaccines S.A.U.**

36410 O Porriño – Spain

**16. MARKETING AUTHORISATION NUMBER(S)**

Spain: 1481 ESP

Portugal: R744DGV

France: FR/V/1723018 6/2017

**17. MANUFACTURER’S BATCH NUMBER**

Batch {number}

**MINIMUM PARTICULARS TO APPEAR ON SMALL IMMEDIATE PACKAGING UNITS**  
**FREEZE-DRIED**

**1. NAME OF THE VETERINARY MEDICINAL PRODUCT**

OCUREV Lyophilisate and solvent for suspension

**2. QUANTITY OF THE ACTIVE SUBSTANCE(S)**

Live attenuated *Brucella melitensis*, Rev-1 (smooth phase) ..... 1-2 x 10<sup>9</sup> cfu

**3. CONTENTS BY WEIGHT, BY VOLUME OR BY NUMBER OF DOSES**

10 doses  
25 doses  
50 doses

**4. ROUTE(S) OF ADMINISTRATION**

Ocular use

**5. WITHDRAWAL PERIOD(S)**

30 days

**6. BATCH NUMBER**

Batch {number}

**7. EXPIRY DATE**

EXP {month/year}  
Once reconstituted, the vaccine should be used within 6 hours

**8. THE WORDS “FOR ANIMAL TREATMENT ONLY”**

For animal treatment only.

**MINIMUM PARTICULARS TO APPEAR ON SMALL IMMEDIATE PACKAGING UNITS**  
**SOLVENT**

**1. NAME OF THE VETERINARY MEDICINAL PRODUCT**

DILUENT FOR OCUREV Lyophilisate and solvent for suspension

**2. QUANTITY OF THE ACTIVE SUBSTANCE(S)**

Patent Blue V (E-131) ..... 0.1 mg/ml

**3. CONTENTS BY WEIGHT, BY VOLUME OR BY NUMBER OF DOSES**

0.5 ml  
1 ml  
2 ml

**4. ROUTE(S) OF ADMINISTRATION**

Ocular use

**5. WITHDRAWAL PERIOD(S)**

Not applicable

**6. BATCH NUMBER**

Batch {number}

**7. EXPIRY DATE**

EXP {month/year}

**8. THE WORDS “FOR ANIMAL TREATMENT ONLY”**

For animal treatment only.

**B. PACKAGE LEAFLET**

**PACKAGE LEAFLET:  
OCUREV  
Lyophilisate and solvent for suspension**

**1. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER AND OF THE MANUFACTURING AUTHORISATION HOLDER RESPONSIBLE FOR BATCH RELEASE, IF DIFFERENT**

**CZ Vaccines S.A.U.**  
A Relva s/n – Torneiros  
36410 O Porriño  
Pontevedra  
Spain

**2. NAME OF THE VETERINARY MEDICINAL PRODUCT**

OCUREV Lyophilisate and solvent for suspension

**3. STATEMENT OF THE ACTIVE SUBSTANCE(S) AND OTHER INGREDIENT(S)**

Each dose (1 drop-approx. 35 µl) of the reconstituted vaccine contains:

**Active substance:**

Live attenuated *Brucella melitensis*, strain Rev-1 (smooth phase) ..... 1 – 2 x10<sup>9</sup> cfu\*

\* cfu: colony forming units

**Excipient(s):**

Patent Blue V (E-131) ..... 0.1            mg/ml

**4. INDICATION(S)**

For active immunisation of sheep and goats to reduce infection and clinical signs caused by *Brucella melitensis*.

**5. CONTRAINDICATIONS**

Do not vaccinate females in the pregnancy/lactation period.

**6. ADVERSE REACTIONS**

Hypersensitivity reactions may occur. This event is very rare. Should this be the case, an appropriate antihistaminic therapy must be administered.

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).

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 inform your veterinary surgeon.

## **7. TARGET SPECIES**

Sheep and goats (replacement).

## **8. DOSAGE FOR EACH SPECIES, ROUTE(S) AND METHOD OF ADMINISTRATION**

Dose: 1 drop (approx. 35 µl) per ocular use to sheep and goats from 3 to 6 months of age.

Maintain usual aseptic conditions.

Reconstitute the vaccine with the coloured solvent, wait some minutes and shake gently to prevent foaming. Carefully remove seal and stopper and place the dropper on the vial mouth. Dispense only 1 drop in the eye of the animal. If there is no warranty that the drop has been deposited correctly, the procedure can be repeated in the other eye.

The vaccine should be administered within 6 hours after reconstitution.

## **9. ADVICE ON CORRECT ADMINISTRATION**

Application should be done under strict veterinary control and comply with the established requirements of the legislation in force. The measures to be adopted for the vaccinated animals and their waste materials, in accordance with the legislation in force, as well as other safety measures that official authorities determine should be taken into account.

## **10. WITHDRAWAL PERIOD(S)**

30 days.

## **11. SPECIAL STORAGE PRECAUTIONS**

Keep out of the reach and sight of children.

Store and transport refrigerated (2 °C – 8 °C).

Protect from light.

Do not freeze.

Do not use after the expiry date which is stated on the label.

Shelf-life after dilution or reconstitution according to directions: 6 hours.

May be transported and stored up to a maximum of 37°C for a period not longer than 7 days.

## **12. SPECIAL WARNING(S)**

Special warnings for each target species:

The vaccine is only used in replacement flocks.

Vaccinate healthy animals only.

Special precautions for use in animals:

The risk of vaccinated animals transmitting the vaccine strain to other stock living with them is practically negligible. Therefore, if non vaccinated animals (including cattle) have contact with the vaccine strain from animals vaccinated with this speciality, they could give positive results in the serological tests. To prevent this possibility, it is advisable that vaccination is done, ideally, in an area different from the one used to house the bulk of the herd and that the vaccinated animals are kept segregated during two weeks from vaccination, as during this period the excretion of the vaccine strain can be produced through the body fluids (nasal cavities and conjunctiva).

Special warning: The microorganism is detectable at 15 days after vaccination in some organs. Taking into account that there could be a potential persistence in cranial lymph nodes for longer time, vaccinated animals should not be slaughtered in the period of 3 months after vaccination. Just in case they should be slaughtered, they will be subjected to the procedures applicable to the animals considered positive to Brucellosis, and the official veterinary documents that legislation in force requires will be necessary.

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

The vaccine can be pathogenic for humans. Since this vaccine has been prepared with a live, attenuated microorganism, appropriate measures must be taken to prevent contamination of the handler and other people that collaborate in the process. If accidental contamination during handling of the vaccine were to occur, seek medical advice immediately and show the package insert to the doctor.

It should not be administered by pregnant women.

During the administration of the product, the person or people who carry it out should be protected with glasses, gloves and mask, hold tightly the head of the animal to avoid sudden movements, and perform it in a safe-guard place in order to protect themselves from gusts of wind. The contact of the glove with the mucous and/or open wounds during and after administration should be avoided.

It should be also taken into account that the period of excretion of the vaccine strain through the body fluids of the vaccinated animals can last until 2 weeks after administration.

Do not smoke, drink nor eat during the administration.

Use during pregnancy, lactation or lay:

Do not use during the whole pregnancy and lactation.

Interaction with other medicinal products and other forms of interaction:

No information is available on the safety and efficacy of this vaccine when used with any other veterinary medicinal product. A decision to use this vaccine before or after any other veterinary medicinal product therefore needs to be made on a case by case basis.

Overdose:

With a ten fold dose it was observed a slight hyperthermia at 4 hours.

Major incompatibilities:

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

**13. SPECIAL PRECAUTIONS FOR THE DISPOSAL OF UNUSED PRODUCT OR WASTE MATERIALS, IF ANY**

Medicines should not be disposed of via wastewater or household waste.

Ask your veterinary surgeon or pharmacist how to dispose of medicines no longer required.

These measures should help to protect the environment.

Any unused product or waste materials should be disposed of in accordance with local requirements.

#### **14. DATE ON WHICH THE PACKAGE LEAFLET WAS LAST APPROVED**

#### **15. OTHER INFORMATION**

Pharmacotherapeutic group: Live bacterial vaccines for sheep and goats.

ATC vet code: QI04AE/QI03AE.

Rev-1 is an attenuated, smooth strain of *B. melitensis*, streptomycin non-dependent, isolated from streptomycin dependent cells, which was obtained from the virulent strain 6056.

The vaccine organism is streptomycin resistant.

The Rev-1 strain has the following characteristics:

- It stimulates active immunity and induces cell immune response, the principal defence mechanism against *Brucella* infections.
- Conjunctival administration induces a weak and short-lasting serological response that avoids the interference with the conventional brucellosis serological tests 4 months after vaccination.

Pack sizes:

Outer box with 1 vial of 10 doses and 1 vial of 0.5 ml of solvent and one sterile dropper.

Outer box with 1 vial of 25 doses and 1 vial of 1 ml of solvent and one sterile dropper.

Outer box with 1 vial of 50 doses and 1 vial of 2 ml of solvent and one sterile dropper.

Not all pack sizes may be marketed.

Veterinary medicinal product subject to prescription.

Veterinary use.

Administration under control or supervision of a veterinary surgeon.