



# **B19 CZV OCULAR**

**Essential tool in the control of bovine  
brucellosis**

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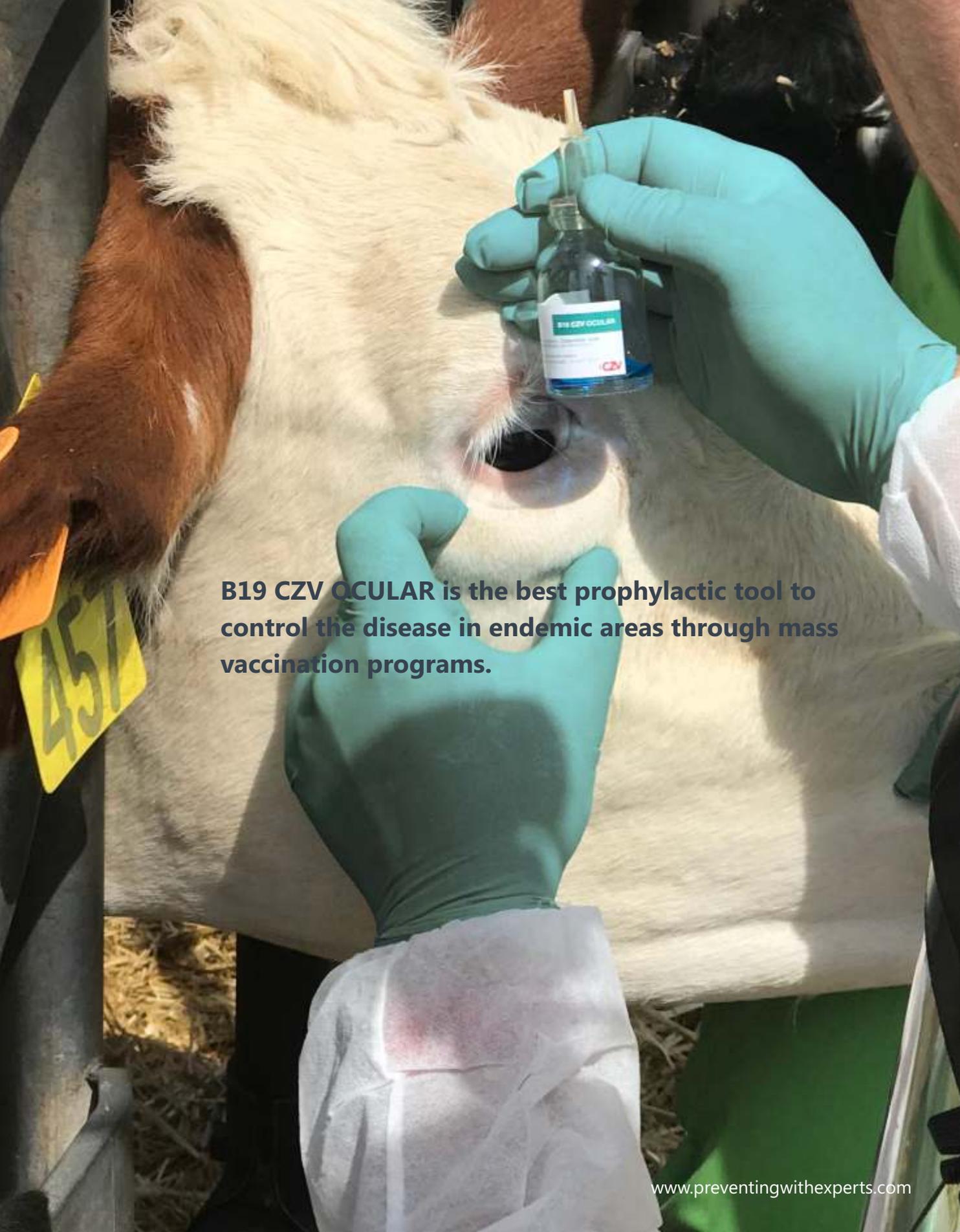
## The vaccine of choice against bovine brucellosis

In addition to its high zoonotic impact, brucellosis is a major cause of abortion and infertility in cattle, which results in significant economic losses for farmers. Vaccination is the most practical and effective tool to reduce the incidence of brucellosis in endemic areas.



B19 CZV OCULAR is a freeze-dried suspension of the live *Brucella abortus* strain 19 vaccine (also called B19 strain) in smooth phase for the immunization of cattle against brucellosis induced either by *B. abortus* or *B. melitensis*. Manufactured in compliance with OIE and EU standards, B19 CZV OCULAR is the first anti-brucellosis vaccine registered for conjunctival administration to cattle.

Moreover, B19 CZV OCULAR is safe enough even in adult cows, being thus the best prophylactic tool to control the disease in endemic areas through mass vaccination programs. Moreover, when applied in young replacement heifers and combined with suitable diagnostic methods, can be used successfully in test and slaughter based eradication programs.



**B19 CZV OCULAR is the best prophylactic tool to control the disease in endemic areas through mass vaccination programs.**

### **Easy administration by conjunctival route**

B19 CZV OCULAR combines both a perfect dissolution of the freeze-dried content with a suitable solvent (stained with Patent Blue V to allow a better assessment of the proper application in

the conjunctival mucosa) and the high dosage precision of the dropper, allowing an easy vaccine application as a single drop placed on the corneal surface.



### **Suitable also in eradication programs**

At difference of that happening with the classical B19 subcutaneous vaccine, B19 CZV OCULAR induces a very weak and short-lasting serological response which does not interfere at long term when applied exclusively in young replacement heifers of 3-4 months of age. In absence of secondary antigenic contacts, most vaccinated heifers became negative in both RBT and CFT brucellosis tests

between 6 and 8 months after vaccination. Thus, this weak antibody response minimizes or even abrogates the potential interference in the conventional serological tests used in test and slaughter eradication programs.

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## The most practical tool to control the disease

When the objective is reducing brucellosis prevalence to a minimum, B19 CZV OCULAR is the vaccine of choice for mass vaccination since:

- A single dose confers suitable immunity in a similar way to that induced by the classical subcutaneous vaccine.
- With the exception of bulls (in which safety has not been fully assessed), it can be used in both young and adult animals including pregnant and lactating cows causing minimal side effects (less than 3% of induced abortions and shedding of the vaccine strain in milk).
- A program based in the conjunctival vaccination of the whole population (with the exception of bulls) being repeated every two years for at least one animal generation (5 to 8 years) is the most practical, economical and effective strategy to control the disease. As an alternative, the vaccination of the whole population the first year and then applying the exclusive vaccination of young replacement heifers the ensuing years will also control the disease, reducing the prevalence to a minimum compatible with the further application of a testing and slaughtering eradication program.

Blasco and Molina-Flores, 2011: Control and Eradication of *Brucella melitensis* Infection in Sheep and Goats. *Vet Clin Food Anim* 27: 95–104



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B-19 CZV Ocular, powder and diluent for suspension

**Statement of the active substances and other ingredients:** Each dose (approx. 35 µl) of reconstituted vaccine contains:

Active substance: *Brucella abortus*, live attenuated strain B-19 (smooth) .....4-7 X 10<sup>8</sup>CFU\*

\*CFU: Colony Forming Units

Excipient(s): Blue patent V (E-131) ..... 0.01%

Powder and diluent for ophthalmic suspension. Bluish solution without particles in suspension.

**Indications:** Active immunisation of bovine against brucellosis caused by *B. abortus* or *B. melitensis* to prevent the infection. Onset of immunity: 4 weeks.

**Contraindications:** None.

**Adverse reactions:** In very rare cases, hypersensitivity reactions may occur. In such cases appropriate antihistaminic treatment should be administered without delay. On very rare occasions, mild signs of conjunctivitis or hyperemia may occur that completely disappear 7 days after the local administration of the vaccine. Local reactions mentioned forwards without treatment. An increase in temperature of up to approximately 2°C can occur very often. The frequency of adverse reactions is defined using the following convention: Very common (more than 1 in 10 animals treated displaying adverse reactions during the course of one treatment). 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. Alternatively, you can report the Spanish Veterinary Pharmacovigilance System via green card. [https://www.aemps.gob.es/vigilancia/medicamentos.Veterinarios/docs/formulario\\_tajeta\\_verde.doc](https://www.aemps.gob.es/vigilancia/medicamentos.Veterinarios/docs/formulario_tajeta_verde.doc)

**Target species:** Bovine.

**Dosage for each species, route(s) and method of administration:** Administration by conjunctival route. Dosage: Administer one single dose (1 drop) for bovine females above 3 months old. In high prevalence conditions (collective prevalence greater than or equal to 2.5%) animals can be revaccinated 2 months after receiving the first dose. When vaccination is intended to be combined with a further testing and slaughtering program, vaccination should be restricted exclusively to young replacement females between 3 and 5 months. A single vaccine dose (1 drop) is recommended under low prevalence conditions (collective prevalence less than 2.5%). In high prevalence conditions (collective prevalence greater than or equal to 2.5%) animals can be revaccinated 2 months after receiving the first dose.

**Advice on correct administration:** With a sterile needle, introduce the total volume of diluent of each format/presentation (according to the number of doses) in the corresponding lyophilized vial. 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.

**Withdrawal period:** Zero days.

**Special storage precautions:** Keep out of the sight and reach of children. Store and transport refrigerated (2 °C - 8 °C). Protect from light. Do not freeze. Shelf life after dissolution or reconstitution according to directions: 6 hours. Do not use this veterinary medicinal product after the expiry date (CAD/EXP) which is stated on the carton and the bottle.

**Packaging:** 1 cardboard box with 1 vial of 25 doses and 1 vial of 3 ml of diluent and one dropper. 1 cardboard box with 1 vial of 50 doses and 1 vial of 3 ml of diluent and one dropper. 1 cardboard box with 1 vial of 100 doses and 1 vial of 6 ml of diluent and one dropper. Not all pack sizes may be marketed.

Medicinal product subject to veterinary prescription.

Administer only by the veterinary surgeon.

Reg. n° 3593

For more information

[www.preventingwithexperts.com](http://www.preventingwithexperts.com)

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