



EUROPEAN MEDICINES AGENCY  
SCIENCE MEDICINES HEALTH

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## EPAR summary for the public

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### Zulvac 1 Bovis

Inactivated vaccine against Bluetongue virus, serotype 1

This document is a summary of the European Public Assessment Report. Its purpose is to explain how the assessment done by the Committee for Medicinal Products for Veterinary Use (CVMP) on the basis of the documentation provided, led to the recommendations on the conditions of use.

This document cannot replace a face-to-face discussion with your veterinarian. If you need more information about your animal's medical condition or treatment, contact your veterinarian. If you want more information on the basis of the CVMP recommendations, read the scientific discussion (also part of the EPAR).

#### What is Zulvac 1 Bovis?

Zulvac 1 Bovis is a vaccine that is available as a suspension for injection. It contains inactivated (killed) bluetongue serotype 1 virus.

#### What is ZULVAC 1 Bovis used for?

Zulvac 1 Bovis is used in cattle to protect them against bluetongue disease, an infection caused by the bluetongue virus which is transmitted by midges. The vaccine is used to prevent viraemia (the presence of the viruses in the blood) in cattle from two and a half months of age.

The vaccine is given to young animals as two injections into the muscle. The first injection is given from two and a half months of age and the second injection is given three weeks later. Protection starts two weeks after the last injection and lasts for a year.



## **How does Zulvac 1 Bovis work?**

Zulvac 1 Bovis is a vaccine. Vaccines work by 'teaching' the immune system (the body's natural defences) how to defend itself against a disease. Zulvac 1 Bovis contains bluetongue viruses that have been inactivated so that they cannot cause the disease. When it is given to cattle, the immune system recognises the viruses as 'foreign' and makes antibodies against them. In the future, if the animals are exposed to the bluetongue virus, their immune systems will be able to produce antibodies more quickly. This will help to protect them against the disease.

Zulvac 1 Bovis contains bluetongue virus of one serotype (serotype 1). The vaccine also contains 'adjuvants' (aluminium hydroxide and saponin) to enhance the immune response.

## **How has Zulvac 1 Bovis been studied?**

The safety of the vaccine was studied in two main laboratory safety studies and a field safety study carried out in cattle as well as two studies carried out in pregnant cows.

The effectiveness of the vaccine was studied in three main laboratory studies in calves where animals were challenged with bluetongue virus serotype 1, after receiving Zulvac 1 Bovis vaccine containing different amounts of virus. The studies aim was to establish the smallest dose of vaccine that prevented viraemia as well as the duration of protection for Zulvac 1 Bovis.

## **What benefit has Zulvac 1 Bovis shown during the studies?**

The studies showed the vaccine prevents viraemia in cattle and offers protection for one year. The vaccine is safe for cattle from two and a half months of age onwards and in pregnant cows.

The vaccine was also generally well tolerated and shown to be safe.

## **What is the risk associated with ZULVAC 1 Bovis?**

Cattle may have a slightly raised body temperature following vaccination.

## **What is the withdrawal period?**

The withdrawal period is the time allowed after administration of the medicine before the animal can be slaughtered and the meat or milk used for human consumption. The withdrawal period for Zulvac 1 Bovis for meat and milk is zero days.

## **Why has Zulvac 1 Bovis been approved?**

The Committee for Medicinal Products for Veterinary Use (CVMP) concluded that the benefits of Zulvac 1 Bovis exceed the risks in the prevention of viraemia caused by bluetongue virus, serotype 1 in cattle from two and a half months of age. The benefit-risk balance may be found in the scientific discussion module of this EPAR.

Zulvac 1 Bovis was initially authorised under 'exceptional circumstances'. This means that it was not possible to obtain complete information about Zulvac 1 Bovis at the time of the initial authorisation. The European Medicines Agency (EMA) reviewed additional information submitted according to an agreed timetable on the quality and safety of the vaccine. In 2012 the CVMP considered that the submitted data were adequate for the authorisation of Zulvac 1 Bovis to convert to normal.

### **Other information about Zulvac 1 Bovis:**

The European Commission granted a marketing authorisation valid throughout the European Union, for Zulvac 1 Bovis on 05/08/2011. Information on the prescription status of this product may be found on the label/outer package.

This summary was last updated in 04-2013.

Medicinal product no longer authorised