BOVIMUN 4

PREVENT • PROTECT • SAVE

IBRV
BVDV
BRSV
PI-3

COMBINED VACCINE AGAINST BRDC

BioTestLab

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BRDC PROPHYLAXIS

Mass diseases of the intestines and abdominal cavity, and respiratory diseases in cattle and calves are common throughout the world. Usually, pneumoenteritis occurs with the participation of several pathogens (IBRv, BVDv, PI-3, BRSv) which lead to complications of the infectious process.

ECONOMIC LOSSES WITHOUT VACCINATION

Young cattle:
- increase in feed conversion
- average daily gain is decreasing
- treatment costs
- calf mortality

Breeding stock of cattle:
- decreased fertility
- abortions
- mummification
- malformations (deformities)
- infertility

CALCULATE YOUR DALY LOSSES

$$\frac{(160 \times PrM) + (30 \times PrF)}{100} \times 33 = \text{loss per calf for the first 2 months}$$

160 L — milk
30 kg — pre-starter feed
recommended calf diet for 2 months

> **33%** increase in feed conversion for young cattle

PrM — The price of 1 liter of milk; **PrF** — The price of 1 kg of pre-starter feed

Vaccine prophylaxis is a reliable way to protect animals from infectious diseases. Its effectiveness is assessed by monitoring the intensity of the animal's immunity.

COMPOSITION OF ONE DOSE OF BOVIMUN 4

Vaccine strains in suspension (before inactivation):

Bovine rhinotracheitis virus, strain "BM" ≥ $10^{7,0}$ TCD_{50}

Parainfluenza-3 virus (PI-3), strain "BR"-11 ≥ 480 HAU

Bovine diarrhea virus, strain "D-13" ≥ $10^{6,0}$ TCD_{50}

Vaccine strain in lyophilized component:

live virus of bovine respiratory syncytial disease, strain "RS-09" ≥ $10^{4,0}$ TCD_{50}

- **High titers of viral activity ensure the induction of an intense humoral immune response in vaccinated animals (IBRv ≥ $10^{7,0}$ TCD_{50}/dose, PI-3 not less than 480 HAU per dose, BVDv ≥ $10^{6,0}$ TCD_{50}/dose)**
- **The optimal ratio of antigens in the vaccine and the ratio of antigen-adjuvant, which is 60/40, respectively, for the formation of protective antibodies in vaccinated animals in studies on laboratory (rabbits) and production (calves) animals, have been determined**
- **Maximum preservation of the immunogenic properties of the vaccine with the loss of infectious activity due to proven methods of inactivation of each individual vaccine virus**

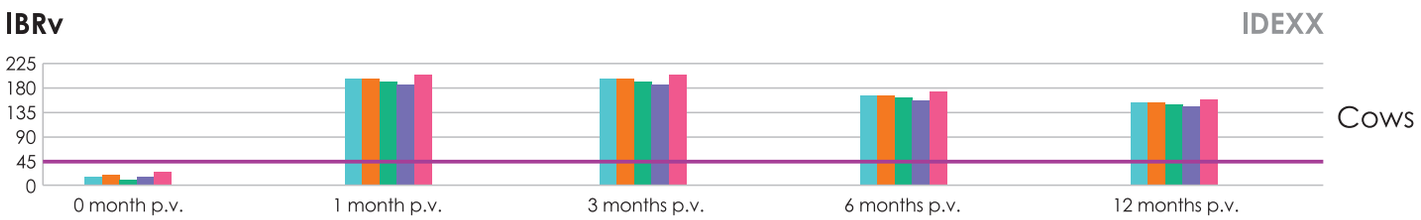
PROVEN EFFICIENCY

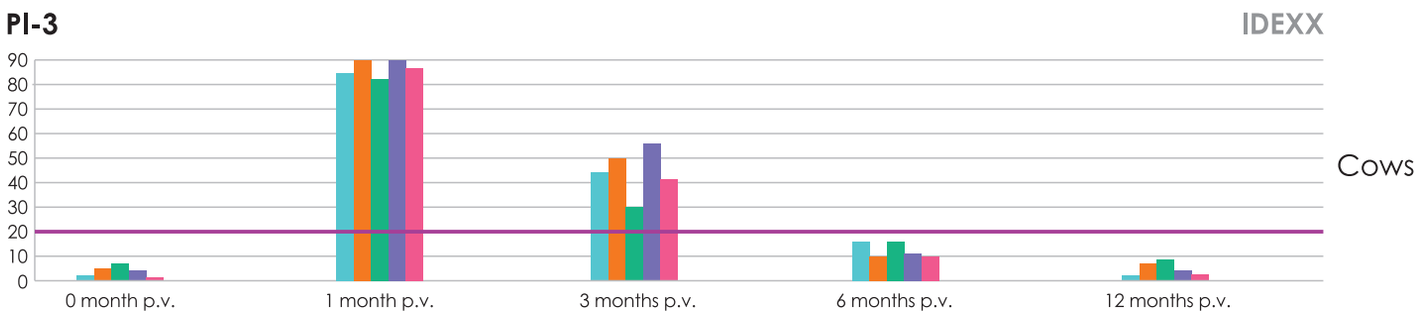
HOW TO CHECK THE EFFICACY AND QUALITY OF VACCINATION

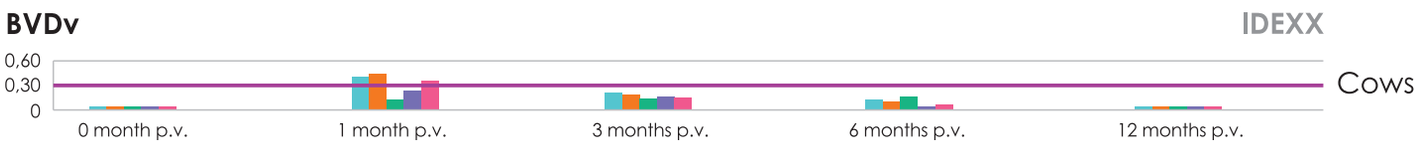
1. Check antibody levels at the time of vaccination to determine the health status of the herd. If antibodies are detected, consider this result when assessing post-vaccination immunity over time.
2. Check antibody levels one month after vaccination to monitor the quality and effectiveness of vaccinations.
3. Six months later, check the level of antibodies to assess the duration of post-vaccination humoral protection and plan the next revaccination.

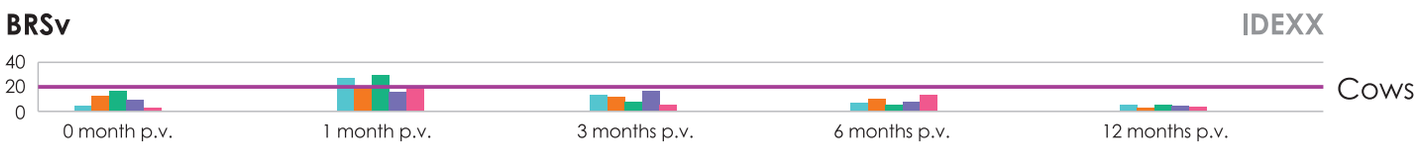
FARM EXPERIENCE WITH BOVIMUN 4 VACCINE

• IBR characterized by the development of a strong humoral response and high antibody titers. Titers above 100 in IDEXX test systems are considered protective levels.
• PI-3 — antibody levels are protective if their titers are above 40. A specific feature of the post-vaccination humoral immune response to vaccination against PI-3 is a short half-life of antibodies, the level of antibodies decreases rapidly, and the humoral response is not long-lasting.
• The post-vaccination immune response for BVD and BRS is characterized by the absence of a high level of humoral protection. The purpose of vaccination is to prepare the immune system for a quick response when infected with a field virus.
• This specific feature of the immune system is associated with the characteristics of the infectious agents, not with the vaccine.









BOVIMUN 4

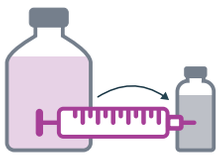
HOW TO PREPARE VACCINE BEFORE USE

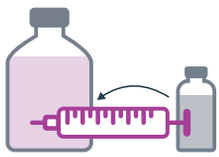
transfer 5 ml of the vaccine suspension into the vial with the lyophilized component using a syringe

shake well until the lyophilisate is completely dissolved

draw up the dissolved material with a syringe and pour it back into the suspension vial

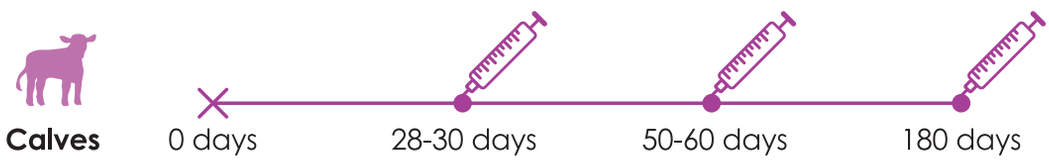
repeat the procedure until the solution is completely transferred into the vial with the suspension

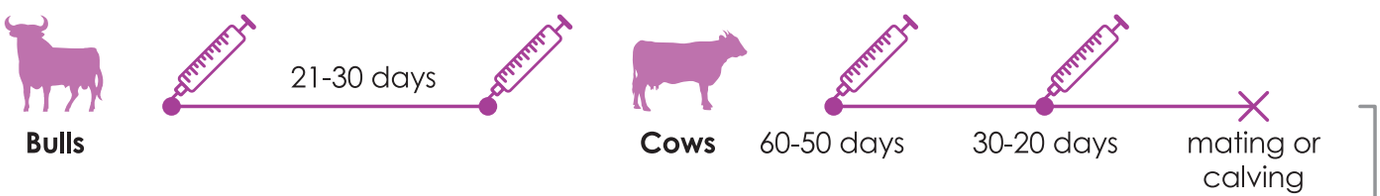





VACCINATION SCHEMES

at a dose of **3 ml** intramuscularly in the lower third of the neck





Revaccination is carried out annually

BOVIMUN 4 ALLOWS YOU TO:

1. PREVENT
infection of calves by pregnant cows during pregnancy as well as after calving (1 month)

2. PROTECT
young cattle and prevent infection

3. SAVE
productivity and economic benefits

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PRODUCT DESCRIPTION