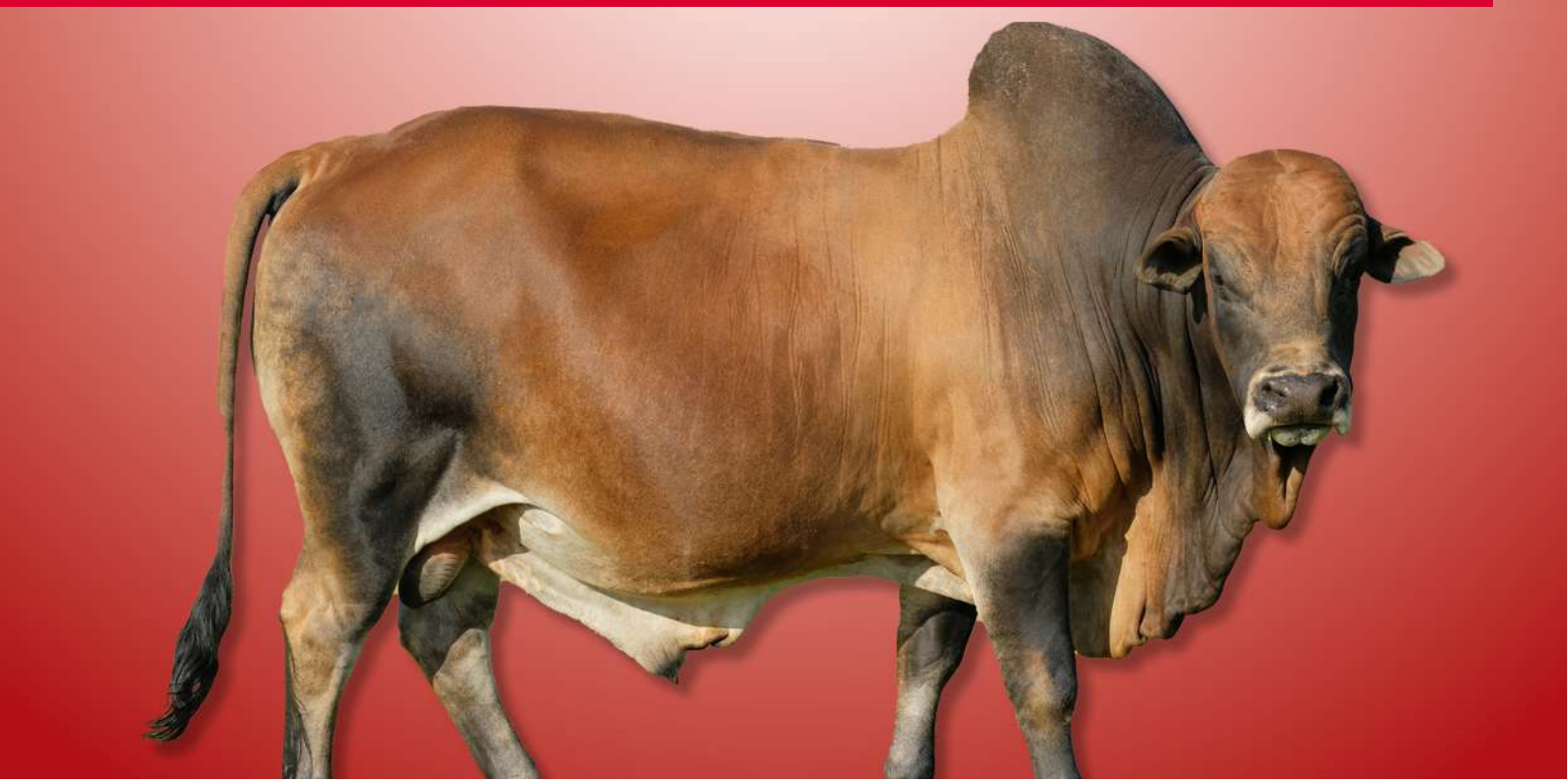
BUPARVEX PLUS Injection

Buparvaquone 50mg + Furosemide 72mg Injection

DATA SHEET



INDICATIONS

A potent injectable therapy for the treatment of theileriosis (East Coast Fever), particularly for advanced cases with pulmonary oedema. Each ml, contains buparvaquone 50 mg and furosemide 72 mg.

Buparvaquone is theilericidal agent with activity against schizonts and piroplasms. Furosemide is a loop diuretic that facilitates rapid resolution of Pulmonary oedema.

BENEFITS

- EFFECTIVE TREATMENT OF EAST COAST FEVER.
- COMPLETE RESOLUTION OF PULMONARY OEDEMA, A LIFE THREATENING COMPLICATION OF EAST COAST FEVER.

LIST No	UNIT PACKAGE	CASE SIZE
1BUP202	20 ml	144
1BUP203	50 ml	72

See reverse for Administration & Dosage

BUPARVEX PLUS Injection

Buparvaquone 50mg + Furosemide 72mg Injection

BUPARVEX PLUS

Buparvex Plus is a potent injectable solution used for treatment of Theileriosis (East Coast Fever) in cattle. It is especially valuable in advanced and complicated cases, including where the disease has progressed to pulmonary oedema, a severe and life-threatening accumulation of fluid in the lungs. The drug acts against *Theileria parva*, the protozoan parasite responsible for **East Coast Fever**, helping stop parasite multiplication and allowing recovery.

Frusemide is a loop diuretic. It works by increasing urine production, which helps the body get rid of excess fluid. When used in Theileriosis cases with pulmonary oedema, Frusemide helps reduce fluid in the lungs, improving breathing and stabilizing the animal. When theileriosis progresses to pulmonary oedema, treating the parasite alone is not enough. Buparvex Plus tackles the parasite and Frusemide provides critical supportive therapy by relieving respiratory distress. Using both together increases the chance of recovery in severe cases.

TARGET SPECIES: Cattle

DOSAGE AND ADMINISTRATION:

Administer by intramuscular injection into the neck muscles at a dosage rate of 1 ml per 20 kg body weight (equivalent to 2.5 mg/kg Buparvaquone and 2.75 mg/kg Frusemide).

In cases of exceptionally severe theileriosis accompanied by pulmonary oedema, a repeat injection after 48 hours which is recommended.

For animals with persistent severe symptoms, an additional treatment at half the standard dosage may be administered at 24-hour intervals, as necessary.

BENEFITS OF BUPARVEX PLUS

- **Targeted management of pulmonary oedema.**
  The frusemide component delivers rapid diuretic action, promoting efficient clearance of excess pulmonary fluid in advanced theileriosis cases.
- **Enhanced clinical outcome in advanced cases.**
  The synergistic combination of buparvaquone (theilericidal) and furosemide (diuretic) supports rapid reduction of Pulmonary oedema, improves respiratory function and contributes to better survival rates.

ADVERSE EFFECTS:

Localized swelling may occur at the injection site. This reaction is generally mild and resolves within a few days without the need for additional treatment.

Buparvaquone has a wide safety margin, and cases of over-dosage are unlikely to produce significant adverse effects.

No other adverse reactions have been commonly reported when the product is administered according to the recommended dosage and route.

SPECIFICITY OF ACTION OF BUPARVEX PLUS:

Buparvaquone exhibits high specificity in its mode of action. It is effective solely against Theileriosis and a few closely related theilerial infections.

Beyond its theilericidal activity, Buparvaquone has no other clinically significant effects in treated animals. This specificity ensures targeted treatment with minimal risk of unintended pharmacological actions.

DIAGNOSIS OF THEILERIOSIS:

Clinical signs of Theileriosis typically include:

- High fever
- Swollen superficial lymph nodes
- Nasal discharge
- Coughing and other signs of pulmonary oedema
- Petechial haemorrhages on mucous membranes

In some regions affected by *T. annulata*, animals may show grossly protruding eyeballs, but this sign is not typical of *T. parva* infections. Anaemia is not typical of uncomplicated *T. parva* infections.

Confirmatory Diagnosis - Clinical suspicion should be supported by microscopic examination:
Blood smear- Identification of intraerythrocytic piroplasms
Lymph node biopsy smear - Detection of schizonts within enlarged lymphoid cells (lymphoblasts) Presence of schizonts in a hyperplastic lymph node smear is the most reliable indication of clinical Theileriosis.
Large numbers of piroplasms - In a blood smear indicate advanced disease.
Absence of piroplasms - Despite clinical signs may indicate early or acute Theileriosis.
Small numbers of piroplasms alone are not diagnostic - they may represent:

- Non-pathogenic *Theileria* spp.
- Low-grade parasitaemia in asymptomatic carrier animals

IMMUNO-DEPRESSIVE EFFECT OF THEILERIOSIS:

Theileriosis is a lympho-destructive disease. Severe infections may destroy over 90% of lymphoid cells, resulting in profound immunosuppression.

Consequences of **Immunosuppression**

- Intercurrent pneumonia and enteritis are common and require specific treatment.
- Immunocompetence usually returns within a few days following successful treatment with Buparvex Plus.
- Theileriosis can activate a carrier state of anaplasmosis, causing severe clinical disease characterized by profound anaemia with low parasitaemia of Anaplasma.
- In East Africa, up to 50% of Theileriosis cases may be complicated by anaplasmosis.

RESPONSE TO TREATMENT WITH BUPARVEX PLUS:

Typical Response

- Uncomplicated cases respond rapidly.
- Body temperature returns to normal within 1–2 days.
- Pulmonary oedema, lethargy, and (for *T. annulata*) anaemia typically improve within 48 hours.

Treatment Requirements

- Moderate cases are often cured with a single injection.
- Severe cases may require additional injections, administered as clinically indicated.
- If recovery is slow, reassess the diagnosis, considering possible intercurrent conditions.
- Persistent anaemia may indicate concurrent anaplasmosis or babesiosis.

Relapse Monitoring

- Relapses may occur even after clinical improvement.
- Animals should be monitored for at least 3 weeks and re-treated promptly if symptoms recur.

Supportive Therapy

- Concurrent infections:
- Anaplasmosis: Treat with imidocarb or tetracycline
- Babesiosis: Treat with imidocarb or diminazene.

CARE OF TREATED ANIMALS:

- Provide adequate water and nutrition.
- Minimize stress, especially during recovery.
- Offer supportive therapy in anaemic animals.
- Since Theileriosis is tick-borne and not contagious, affected animals may be hand-treated for ticks.
- Do not dip animals until full recovery, as dipping causes unnecessary stress.

IMMUNITY AFTER TREATMENT:

- Recovered animals develop strong immunity to the same strain of Theileriosis.
- Protection against other strains may be partial.
- Cured animals rarely develop Theileriosis again unless:
  - Severely stressed
  - Exposed to extremely high challenge levels
- Animals cured of East Coast Fever are not immune to Corridor disease.

WITHDRAWAL PERIOD:

Milk for human consumption: Withdraw for 48 hours after treatment.
Meat: Animals must not be slaughtered for human consumption for 42 days after treatment.
Milk from treated animals is safe for calf consumption.

WARNINGS AND PRECAUTIONS:

Do not administer by intravenous or subcutaneous injection.
Do not exceed 10 ml per injection site if the required volume is larger, divide the dose between multiple sites. Subcutaneous injection results in poor absorption and reduced efficacy.
Do not use Buparvex Plus in animals with known sulphonamide sensitivity.
Localised transient swelling may occur at injection sites.
Buparvex Plus is very safe, and overdosage is unlikely to cause significant adverse effects.

SPECIAL STORAGE PRECAUTIONS:

Store below 30°C.
Protect from light.
Keep out of reach of children.

SHELF LIFE:

Shelf-life of the veterinary medicinal product as packaged for sale: 3 years.
Shelf-life after first opening the immediate packaging: 28 days.
Discard unused material.

NATURE AND CONTENTS OF IMMEDIATE PACKAGING:

20ml and 50ml colourless or amber glass vials, fitted with butyl rubber stoppers and sealed with plain aluminium caps containing a yellow to brown clear solution.

OTHER INFORMATION:

POM-V

Marketing Authorization Holder:
Bimeda AMEA Limited,
1B, The Herbert Building,
The Park, Carrickmines,
Dublin 18, Ireland.

TAKE TIME OBSERVE LABEL DIRECTIONS

www.bimeda.com