

## **BACTIREST-M CREAM**

Mometasone Furoate & Fusidic Acid Cream

### **COMPOSITION**

Mometasone Furoate USP	0.1% w/w
Fusidic Acid IP	2.0% w/w
in a Translipid cream base	q.s.

### **Preservatives:**

Potassium Sorbate BP	0.2% w/w
Phenoxyethanol BP	0.5% w/w

### **DESCRIPTION**

**Mometasone** is a medium-potency topical synthetic corticosteroid with anti-inflammatory action.

**Fusidic acid** is a bacteriostatic antibiotic that is often used topically in creams.

**Translipid cream base** is a unique combination of 70% lipids dispersed in 30% water. It spreads better, helps the active ingredients to stay longer and penetrate faster; giving the power of an ointment with the comfort of a cream.

### **CLINICAL PHARMACOLOGY**

#### **Pharmacodynamics**

Mometasone is a synthetic corticosteroid which is highly effective but may have a lower incidence of adverse effects than other corticosteroids. Corticosteroids have multiple mechanisms of action including anti-inflammatory activity, immunosuppressive properties, and antiproliferative actions.

Anti-inflammatory effects result from decreased formation, release and activity of the mediators of inflammation (e.g. kinins, histamine, liposomal enzymes, prostaglandins, leukotrienes) which reduces the initial manifestations of the inflammatory process. Corticosteroids inhibit margination and subsequent cell migration to the area of injury, and also reverse the dilation and increased vessel permeability in the area, resulting in decreased access of cells to the sites of injury. This vasoconstrictive action decreases serum extravasation, swelling and discomfort.

The immunosuppressive properties decrease the response to delayed and immediate hypersensitivity reactions (e.g., type III and type IV). This results from inhibition of the toxic effect from antigen and antibody complexes that precipitate in vessel walls creating cutaneous allergic vasculitis, and by inhibiting the action of lymphokines, target cells, and macrophages which together produce allergic contact dermatitis reactions. Additionally, the access of sensitized T lymphocytes and macrophages to target cells may also be prevented by corticosteroids. The antiproliferative effects reduce hyperplastic tissue characteristic of psoriasis.

Fusidic acid is a true antibiotic, derived from the fungus *Fusidium coccineum*. Fusidic acid works by interfering with bacterial protein synthesis, specifically by preventing the translocation of the elongation factor G (EF-G) from the ribosome. Fusidic acid is only effective on gram-positive bacteria such as *Staphylococcus* species, *streptococcus* and *Corynebacterium* species. Fusidic acid inhibits bacterial replication and does not kill the bacteria, and is therefore termed "bacteriostatic". When applied topically, the antibacterial activity of Fusidic acid is not diminished in the presence of corticosteroid.

### **Pharmacokinetics**

Absorption: When used singly, the systemic absorption of Mometasone furoate (0.1% ointment) is less than 1%.

Metabolism: Absorbed Mometasone is extensively metabolized in the liver after topical application.

Excretion: Following percutaneous absorption, topical corticosteroids are excreted primarily by the kidneys and to a small extent in the bile. The elimination half-life of Mometasone is 5.8 hours.

There are no data which define the pharmacokinetics of **Bactirest-M Cream**, following topical administration in man. However, *in vitro* studies show that Fusidic acid can penetrate intact human skin. The degree of penetration depends on factors such as the duration of exposure to Fusidic acid and the condition of the skin. Fusidic acid is excreted mainly in the bile with little excreted in the urine.

### **INDICATIONS**

**Bactirest-M Cream** is indicated for use in inflammatory dermatoses where bacterial infection is present or likely to occur.

### **CONTRAINDICATIONS**

**Bactirest-M Cream** is contraindicated in patients with a history of hypersensitivity to Mometasone, Fusidic acid or any other component of the formulation.

### **DOSAGE & ADMINISTRATION**

Apply a small quantity to the affected area twice daily until a satisfactory response is obtained. A single treatment course should not normally exceed 2 weeks.

### **PRECAUTIONS**

- Patients with a history of allergic-type responses to other topical or oral corticosteroids (enhanced risk of sensitivity)
- Infection at or near treatment sites (risk of worsening/spread)
- Patients with evidence of preexisting skin atrophy (exacerbation)
- Diabetes mellitus (potential hyperglycemic action of Mometasone if sufficient absorption)
- Patients with glaucoma or cataracts (potential worsening if sufficient absorption of Mometasone)
- Pregnancy or breast-feeding period (safety not clearly established)
- May cause hypothalamic-pituitary-adrenal axis suppression, Cushing's syndrome, hyperglycemia, or glycosuria, especially in patients with liver failure
- Avoid occlusive dressings or use over large surface areas
- Face, groin, and axillae are more susceptible to adverse topical effects
- Children are more susceptible to systemic absorption and toxicity
- Mometasone may increase the risk of serious or fatal infection in individuals exposed to viral illnesses such as chickenpox or measles

### **DRUG INTERACTIONS**

The combination of mometasone and anthralin topicals (used to treat psoriasis) should not be used since concomitant use may increase the symptoms of psoriasis. It is therefore advisable to discontinue topical steroids one week before starting anthralin.

**Pregnancy:** The use of topical **Bactirest-M Cream** in pregnancy requires that the potential benefits be weighed against the possible hazards to the foetus. For Fusidic acid, no clinical data on exposed pregnancies are available. Animal studies do not indicate a direct or indirect harmful effect with respect to pregnancies, embryonal/foetal development, parturition or postnatal development. The safety and efficacy of **Bactirest-M Cream** has not been established in pregnant women. **Bactirest-M Cream** is not recommended in pregnant women.

**Lactation:** There is no clinical data available regarding the excretion of either Mometasone or Fusidic acid in breast milk. No effects on the sucking child are anticipated since the systemic exposure of the breast-feeding woman to Fusidic acid and Mometasone is negligible following topical application. Nevertheless, the use of **Bactirest-M Cream** is not recommended in breast-feeding mothers.

**Pediatric:** Since safety and efficacy of **Bactirest-M Cream** has not been established in pediatric patients below 12 years of age, its use in this age group is not recommended.

### **ADVERSE REACTIONS**

Local reactions at the application site, including burning, irritation, pruritus, and skin atrophy, may develop with fixed-topical Mometasone 0.1% / Fusidic acid 2% in dermatitis patients. Most of these effects have been mild or moderate in severity. Discontinuation of therapy has been required in some patients due to local effects.

Undesirable effects observed for corticosteroids include: Skin atrophy, telangiectasia and skin striae, especially during prolonged application, folliculitis, hypertrichosis, perioral dermatitis and adrenocortical suppression.

### **OVERDOSAGE**

Topically applied **Bactirest-M Cream** may be absorbed in sufficient amounts to produce systemic effects.

Symptoms: Excessive prolonged use of topical corticosteroids can suppress the pituitary-adrenal function resulting in secondary adrenal insufficiency. Appropriate symptomatic treatment is indicated in the event of overdosage. Acute hypercorticoid symptoms are virtually reversible. Treat electrolyte imbalance if necessary. In case of chronic toxicity, slow withdrawal or corticosteroids is advised.

### **PRESENTATION**

**Bactirest-M Cream** is available in a tube of 10g.

### **STORAGE**

Store below 25°C. Do not freeze.