1.17. Summary Product Characteristics (SPC)

1.17.1 Product Information for Health Professional

1. Generic Name (s): Name of Product:

Beclomethasone Dipropionate, Neomycin Sulphate & Miconazole Nitrate Cream

Brand name, if any:

MYCOMIN

2. Qualitative and Quantitative Composition

Beclomethasone Dipropionate USP…….. 0.025% w/w
Neomycin Sulphate BP…….…….... 0.5% w/w
Miconazole Nitrate BP …….…….2.0% w/w
Cream base……qs

3. Pharmaceutical form

Semi – Solid Dosage Form (cream)

4. Clinical particulars:

4.1 Therapeutic Indications:

MYCOMIN Cream contains the active compound Beclomethasone Dipropionate (a synthetic corticosteroid), Miconazole Nitrate and Neomycin for topical dermatologic use.

Beclomethasone Dipropionate is an anti-inflammatory, synthetic, halogenated steroid having the chemical name, 9-Chloro-11(beta), 17,21-trihydroxy-16(beta)- methylpregna-1, 4-diene-3, 20-dione 17,21-dipropionate.

Neomycin sulphate, an aminoglycoside antibiotic, is the sulphate salt of neomycin B and C, produced by the growth of Streptomyces fradiae.

Miconazole interacts with 14-α demethylase, a cytochrome P-450 enzyme necessary to convert lanosterol to ergosterol. As ergosterol is an essential component of the fungal cell membrane, inhibition of its synthesis results in increased cellular permeability causing leakage of cellular contents.

MYCOMIN Cream is indicated for the relief of the inflammatory manifestations of corticosteroid responsive dermatoses when complicated by secondary infection caused by organisms sensitive to the components of this dermatologic preparation or when the possibility of such infection is suspected. Such disorders include: Chronic dermatitis of the extremities, balanoposthitis, eczematoid dermatitis, contact dermatitis, follicular dermatitis, parakeratosis, paronychia, anal pruritus, intertrigo, impetigo, neurodermatitis, angular stomatitis, photosensitivity dermatitis, lichenified inguinal dermatophytosis and tinea infections such as tinea pedis, tinea cruris and tinea

corporis. As with other highly active corticosteroids, therapy should be discontinued when control has been achieved. If no improvement is seen within 2 weeks, reassessment of the diagnosis may be necessary.

4.2 Posology and Method of Administration:

Topical Administration (Administered via Skin)
Adults and children over the age of 12 years
Topical administration. Application to the affected area usually one to three times daily or as directed by the physician
A small quantity of MYCOMIN Cream should be applied to cover completely the affected area two or three times daily, or as prescribed by the physician.
Frequency of application should be determined according to severity of the condition.
Duration of therapy should be determined by patient response. In cases of tinea pedis, longer therapy (2 - 4 weeks) may be necessary.

4.3 Contraindications:

MYCOMIN Cream is contraindicated in those patients with a history of sensitivity to any of its components or to other corticosteroids or imidazoles.
If irritation or sensitisation develops with the use of MYCOMIN Cream, treatment should be discontinued and appropriate therapy instituted.
MYCOMIN Cream is contraindicated in facial rosacea, acne vulgaris, perioral dermatitis, napkin eruptions and bacterial or viral infections.
MYCOMIN Cream is contraindicated in those patients with a history of sensitivity reactions to any of its components.
Use in pediatric patients under 12 years of age is not recommended.

4.4 Special Warnings and Precautions for Use:

Keep out of the reach of children.

MYCOMIN Cream should not be used with occlusive dressings.

If used in children or on the face courses should be limited to 5 days. Long term continuous therapy should be avoided, particularly in infants and children where adrenal suppression may occur even without occlusion.

If irritation or sensitization develops, treatment should be discontinued and appropriate remedial therapy instituted.

In the presence of bacterial or viral infection, an appropriate antibacterial or antiviral agent should be administered concurrently. If response does not occur promptly, MYCOMIN Cream should be discontinued until the infection has been controlled adequately.

Systemic absorption of topical corticosteroids will be increased if extensive body surface areas or skin folds are treated. Suitable precautions should be taken under these conditions or when long term use is anticipated, particularly in infants and children.

Any of the side effects that are reported following systemic use of corticosteroids, including adrenal suppression, manifestation of Cushing's syndrome, hyperglycemia, and glycosuria may also occur with topical steroids, espeically in infants and children.

Hypothalamic-pituitary adrenal axis suppression. Cushing's syndrome and intracranial hypertension have been reported in children receiving topical corticosteroids. Manifestation of adrenal suppression in children include linear growth retardation, delayed weight gain, low plasma cortisol levels, and absence of response to ACTH stimulation. Manifestation of intracranial hypertension include bulging fontanelles, headaches, and bilateral papilloedema.

The safety and effectiveness of MYCOMIN in children below the age of 12 has not been established.

MYCOMIN Cream is not intended for ophthalmic use

Systemic absorption of topical corticosteroids can produce reversible HPA axis suppression with the potential for glucocorticosteroid insufficiency after withdrawal from treatment. Patients applying a topical steroid to a large surface area or to areas under occlusion should be evaluated periodically for evidence of HPA axis suppression. 3 Manifestations of Cushing syndrome, hyperglycemia, and glucosuria can also be produced in some patients by systemic absorption of topical corticosteroids while on therapy.
Pediatric patients may be more susceptible to systemic toxicity from equivalent doses due to their larger skin surface to body mass ratios.
If irritation or sensitization develops with the use of MYCOMIN -CG Cream, treatment should be discontinued and appropriate therapy instituted. Prolonged use of topical antibiotics occasionally may result in overgrowth of nonsusceptible organisms.

If this occurs or if irritation, sensitization or super infection develops, treatment with MYCOMIN Cream should be discontinued and appropriate therapy instituted.

4.5 Interaction with other medicinal products and other forms of interaction:

No formal drug-drug interaction studies have been performed with MYCOMIN -CG cream

4.6 Pregnancy and Lactation:

Pregnancy:

Pregnancy & Nursing Mothers: Since safety of topical corticosteroid use in pregnant women has not been established, drugs of this class should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus. Drugs of this class should not be used extensively in

large amounts or for prolonged periods of time in pregnant patients. Since it is not known whether topical administration of corticosteroids can result in sufficient systemic absorption to produce detectable quantities in breast milk, a decision should be made to discontinue nursing or to discontinue the drug, taking into account the importance of the drug to the mother.

Pediatric Use:

Safety and effectiveness of MYCOMIN Cream in pediatric patients have not been established. HPA axis suppression, Cushing's syndrome, linear growth retardation, delayed weight gain, and intracranial hypertension have been reported in children receiving topical corticosteroids.

Carcinogenesis, Mutagenesis, Impairment of Fertility:

There was no evidence of carcinogenicity in the study conducted in rats. Studies to assess the mutagenic potential of beclomethasone dipropionate have not been conducted. Impairment of fertility, as evidenced by inhibition of the estrous cycle in dogs, was observed following treatment by the oral route at a dose of 0.5 mg/kg/day.

4.7 Effects on ability to drive and use machines:

Not Relevant

4.8 undesirable effects:

Adverse reactions reported for Lotriderm include: burning and stinging, maculopapular rash, oedema, paraesthesia and secondary infection. Reported. Reactions to betamethasone dipropionate include: burning, itching, irritation, dryness, folliculitis, hypertrichosis, acneiform eruptions, hyperpigmentation, hypopigmentation perioral dermatitis, allergic contact dermatitis, maceration of the skin, secondary infection, skin atrophy, striae, miliaria, capillary fragility (ecchymoses) and sensitisation. In children receiving topical corticosteroids, Hypothalamic-pituitary adrenal (HPA) axis suppression, Cushing's syndrome and intracranial hypertension.

4.9 Overdose:

Symptoms: Excessive or prolonged use of topical corticosteroids can suppress hypothalamic-pituitary-adrenal function, resulting in secondary adrenal insufficiency, and produce manifestations of hypercorticism, including Cushing's disease. Excessive or prolonged use of topical antibiotics may lead to overgrowth of nonsusceptible organisms in lesions. Appropriate symptomatic treatment is indicated. Acute hypercorticoid symptoms are usually reversible. Treat electrolyte imbalance, if necessary. In case of chronic toxicity, slow withdrawal of corticosteroids is advised. If overgrowth by non-susceptible organisms occurs, stop treatment with MYCOMIN Cream and institute appropriate therapy..

5. Pharmacological Properties:

5.1 Pharmacodynamic Properties:

Beclomethasone Dipropionate : Unbound corticosteroids cross cell membranes and bind with high affinity to specific cytoplasmic receptors. The result includes inhibition of leukocyte infiltration at the site of inflammation, interference in the function of mediators of inflammatory response, suppression of humoral immune responses, and reduction in edema or scar tissue. The antiinflammatory actions of corticosteroids are thought to involve phospholipase A2 inhibitory proteins, lipocortins, which control the biosynthesis of potent mediators of inflammation such as prostaglandins and leukotrienes. For the investigated use in the treatment of GvHD or Crohn's, beclometasone acts by binding to interleukin-13 to inhibit cytokines, which in turn inhibits inflammatory chemicals downstream.

Pharmacodynamics Beclomethasone 17,21-dipropionate is a diester of beclomethasone which has potent glucocorticosteroid and weak mineralocorticosteroid activity. The mechanism for the anti-inflammatory action of beclomethasone dipropionate is unknown. It is postulated that topical steroids control the biosynthesis of potent mediators of inflammation such as prostaglandins and leukotrienes by inhibiting the release of their common precursor, arachidonic acid. Corticosteroids are also thought to act by the induction of phospholipase A2 inhibitory proteins.

Miconazole is an anti-fungal medication related to Azole. Miconazole prevents fungal organisms from producing vital substances required for growth and function. This medication is effective only for infections caused by fungal organisms. It will not work for bacterial or viral infections

Neomycin is an aminoglycoside antibiotic. Aminoglycosides work by binding to the bacterial 30S ribosomal subunit, causing misreading of t-RNA, leaving the bacterium unable to synthesize proteins vital to its growth. Aminoglycosides are useful primarily in infections involving aerobic, Gram-negative bacteria, such as Pseudomonas, Acinetobacter, and Enterobacter. In addition, some mycobacteria, including the bacteria that cause tuberculosis, are susceptible to aminoglycosides. Infections caused by Gram-positive bacteria can also be treated with aminoglycosides, but other types of antibiotics are more potent and less damaging to the host. In the past the aminoglycosides have been used in conjunction with penicillin-related antibiotics in streptococcal infections for their synergistic effects, particularly in endocarditis. Aminoglycosides are mostly ineffective against anaerobic bacteria, fungi and viruses.

Neomycin acts on bacteria by interfering with bacterial protein synthesis by binding to 30s ribosomes. The antibacterial spectrum of Neomycin includes specific organisms which are susceptible to it and generally includes all medically important aerobic gram negative bacilli except Pseudomonas aeruginosa. Anaerobic bacteria are resistant. Staphylococcus aureus and Staph. epidermidis are highly sensitive, but all streptococci are relatively resistant.

5.2 Pharmacokinetic Properties:

Topical corticosteroids can be absorbed from normal intact skin. The extent of percutaneous absorption of topical corticosteroids is determined by many factors, 2 including the vehicle and the integrity of the epidermal barrier. Inflammation and/or other disease processes in the skin may increase percutaneous absorption.

5.3 Pre-Clinical Safety Data:

There are no pre-clinical data of relevance to the product

6. Pharmaceutical Particulars:

6.1 List of Excipients:

- Cetomacrogol Emulsifying Wax
- Cetostearyl Alcohol
- Propylene Glycol
- Light Liquid Paraffin
- Disodium Edetate
- Chlorocresol
- Sodium Metabisulphite
- Purified Water

6.2 Incompatibilities:

Not applicable

6.3 Shelf Life:

24 Months

6.4 Special Precautions for Storage:

Store at temperatures below 30^0 C.

Do Not Freeze.

6.5 Nature and Contents of Container:

Lami tubes internally coated with an epoxy resin based lacquer and closed with a polypropylene cap.

6.6 Special Precautions for disposal and other handling:

No special requirements.

7. Marketing authorisation holder

Not Applicable

8. Marketing authorisation number(s)

Not Applicable

9. Date of first authorisation/renewal of the authorization

Not Applicable

10. Date of revision of the text

Not Applicable