

1.3.1 Summary of Product Characteristics (SmPC)

1. Name of the medicinal product

1.1 (Invented) Name of the medicinal product

BECAM CREAM (Betamethasone Dipropionate, Clotrimazole & Neomycin Sulfate Cream)

1.2 Strength

Each gram contains:

Clotrimazole USP.....1.0 % w/w

Betamethasone Dipropionate USP

Eq. to Betamethasone.....0.05 % w/w

Neomycin Sulfate USP

Eq. to Neomycin Base0.5 % w/w

Cream base.....q.s.

1.3 Pharmaceutical form

Topical Cream

2. Qualitative and quantitative composition

Batch Size: 600 kg (20,000 Tubes)

Sr. No.	Name of Ingredient	Specification	Label Claim/ (in % w/w)	O.A. (in %)	Quantity /gm (in mg)	Quantity / 30 gm Tube (in gm)	Quantity / batch (in kg)	Reason For inclusion
1.	Clotrimazole	USP	1.0	10.0	11.0	0.33	6.600	Medicament
2.	Betamethasone Dipropionate Eq. to Betamethasone	USP	0.05	10.0	0.7	0.021	424.38 gm	Medicament
3.	Neomycin Sulfate Eq. to Neomycin Base	USP	0.5	10.0	9.33	0.28	5.512	Medicament
4.	White soft Paraffin	BP	--	--	200.0	6.0	120.0	Cream base
5.	Light Liquid Paraffin	BP	--	--	35.0	1.05	21.0	Emollient
6.	Cetosteryl Alcohol	BP	--	--	72.0	2.16	43.20	Emulsifier/ Stabilizer
7.	Cetamacrogal 1000	BP	--	--	20.0	0.6	12.0	Emulsifying agent
8.	Methyl Paraben	BP	--	--	1.6	0.048	0.960	Preservative
9.	Propyl Paraben	BP	--	--	0.4	0.012	0.240	Preservative
10.	Propylene Glycol	BP	--	--	100	3.0	60.0	Humectant
11.	Disodium EDTA	BP	--	--	0.1	0.003	0.060	Chelating agent
12.	Disodium hydrogen orthophosphate	BP	--	--	0.15	0.0045	0.090	Buffering agent
13.	Para Chloro meta cresol	BP	--	--	1.0	0.03	0.600	Preservative
14.	Sodium dihydrogen orthophosphate	BP	--	--	0.7	0.021	0.420	Buffering agent
15.	Titanium dioxide	BP	--	--	2.5	0.075	1.50	Opacifier
16.	Perfume Fragrance	IH	--	--	5.0	0.15	3.0	Fragrance
17.	Purified water	BP	--	--	Q.S to	Q.S to	Qs to	Vehicle

					1 gm	30 gm	600 kg	
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3. **Pharmaceutical form**

White homogenous cream.

4. **Clinical particulars**

4.1 **Therapeutic indications**

Becam cream is indicated in patients 17 years and older for the topical treatment of symptomatic inflammatory tinea pedis, tinea cruris and tinea corporis due to Epidermophyton floccosum, Trichophyton mentagrophytes, and Trichophyton rubrum. Effective treatment without the risks associated with topical corticosteroid use may be obtained using a topical antifungal agent that does not contain a corticosteroid, especially for non-inflammatory tinea infections. Neomycin sulfate is a broad –spectrum antibiotic agent effective against gram-negative & gram positive organisms, although it is not effective against Pseudomonas aeruginosa.

4.2 **Posology and method of administration**

Posology

Adults and children over the age of 12 years.

Paediatric population

Becam cream is not recommended for children under the age of twelve years.

Method of administration:

Topical administration twice daily for two weeks (tinea cruris, tinea corporis and candidiasis) or for four weeks (tinea pedis).

Use this medication on the skin only. Clean and thoroughly dry the area to be treated. Apply a thin layer of the medication to the affected area and gently rub in, usually twice daily (in the morning and evening) or as directed by your doctor. Wash your hands after using unless you are using this medication to treat the hands. Do not wrap, cover, or bandage the area unless directed to do so by your doctor. Wear loose-fitting clothes after applying the medication to the groin area.

Do not apply the medication in the eyes, nose, mouth, or inside the vagina. If you do get the medication in those areas, flush with plenty of water. The dosage and length of treatment depends on the type of infection being treated. Ringworm or jock itch is usually treated for 2 weeks, and athlete's foot is usually treated for 4 weeks. Do not use more than 45 grams of the cream or 45 milliliters of the lotion per week unless directed and closely monitored by your doctor.

Do not apply more often or use longer than prescribed. This may increase the risk of side effects.

Use this medication regularly to get the most benefit from it. To help you remember, use it at the same times each day.

Continue to use this medication until the full prescribed amount is finished, even if symptoms disappear after a few days. Stopping the medication too early may result in a return of the infection.

Inform your doctor if your condition worsens or does not improve after 1 week of treatment for jock itch or ringworm or 2 weeks of treatment for athlete's foot.

4.3 Contraindications

Becam cream is contraindicated in patients who are sensitive to clotrimazole, betamethasone dipropionate, other corticosteroids or imidazoles, or to any ingredient in these preparations.

4.4 Special warnings and precautions for use

Systemic absorption of topical corticosteroids can produce reversible hypothalamic-pituitary-adrenal (HPA) axis suppression with the potential for glucocorticosteroid insufficiency after withdrawal of treatment. Manifestations of Cushing's syndrome, hyperglycemia, and glucosuria can also be produced in some patients by systemic absorption of topical corticosteroids while on treatment.

Conditions which augment systemic absorption include use over large surface areas, prolonged use, and use under occlusive dressings. Use of more than one corticosteroid containing product at the same time may increase total systemic glucocorticoid exposure. Patients applying Becam cream to a large surface area or to areas under occlusion should be evaluated periodically for evidence of HPA-axis suppression. This may be done by using the ACTH stimulation, morning plasma cortisol, and urinary free cortisol tests.

If HPA-axis suppression is noted, an attempt should be made to withdraw the drug, to reduce the frequency of application, or to substitute a less potent corticosteroid. Recovery of HPA axis function is generally prompt upon discontinuation of topical corticosteroids. Infrequently, signs and symptoms of glucocorticosteroid insufficiency may occur, requiring supplemental systemic corticosteroids.

In a small study, Becam cream was applied using large dosages, 7 g daily for 14 days (BID) to the crural area of normal adult subjects. Three of the eight normal subjects on whom Becam cream was applied exhibited low morning plasma cortisol levels during treatment. One of these subjects had an abnormal Cortrosyn test. The effect on morning plasma cortisol was transient and subjects recovered one week after discontinuing dosing. In addition, two separate studies in pediatric patients demonstrated adrenal suppression as determined by cosyntropin testing.

Pediatric patients may be more susceptible to systemic toxicity from equivalent doses due to their larger skin surface to body mass ratios.

If irritation develops, Becam cream should be discontinued and appropriate therapy instituted.

4.5 Interaction with other medicinal products and other forms of interaction

Becam Cream may cause damage to latex contraceptives as the effectiveness of such contraceptives may be reduced. Consequently patient should be advised to use alternative precautions for at least five days after using this product.

4.6 Fertility, pregnancy and lactation

Pregnancy

Pregnancy Category C: There have been no teratogenic studies performed in animals or humans with the combination of clotrimazole and betamethasone dipropionate.

Corticosteroids are generally teratogenic in laboratory animals when administered at relatively low dosage levels.

Studies in pregnant rats with intravaginal doses up to 100 mg/kg (15 times the maximum human dose) revealed no evidence of fetotoxicity due to clotrimazole exposure. No increase in fetal malformations was noted in pregnant rats receiving oral (gastric tube) clotrimazole doses up to 100 mg/kg/day during gestation days 6-15. However, clotrimazole dosed at 100 mg/kg/day was embryotoxic (increased resorptions), fetotoxic (reduced fetal weights) and maternally toxic (reduced body weight gain) to rats. Clotrimazole dosed at 200 mg/kg/day (30 times the maximum human dose) was maternally lethal, and therefore fetuses were not evaluated in this group. Also in this study, doses up to 50 mg/kg/day (8 times the maximum human dose) had no adverse effects on dams or fetuses. However, in the combined fertility, teratogenicity, and postnatal development study described above, 50 mg/kg clotrimazole, was associated with reduced maternal weight gain and reduced numbers of offspring reared to 4 weeks.

Oral clotrimazole doses of 25, 50, 100, and 200 mg/kg/day (2-15 times the maximum human dose) were not teratogenic in mice. No evidence of maternal toxicity or embryotoxicity was seen in pregnant rabbits dosed orally with 60, 120, or 180 mg/kg/day (18-55 times the maximum human dose).

Betamethasone dipropionate has been shown to be teratogenic in rabbits when given by the intramuscular route at doses of 0.05 mg/kg. This dose is approximately one-fifth the maximum human dose. The abnormalities observed included umbilical hernias, cephalocele and cleft palates. Betamethasone dipropionate has not been tested for teratogenic potential by the dermal route of administration. Some corticosteroids have been shown to be teratogenic after dermal application to laboratory animals.

There are no adequate and well-controlled studies in pregnant women of the teratogenic effects of topically applied corticosteroids. Therefore, Becam cream should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Breastfeeding

Systemically administered corticosteroids appear in human milk and could suppress growth, interfere with endogenous corticosteroids production, or cause other untoward effects. It is not known whether topical administration of corticosteroids could result in sufficient systemic absorption to produce detectable quantities in human milk. Because many drugs are excreted in human milk, caution should be exercised when Becam cream is administered to a nursing woman.

Fertility

Not available.

4.7 Effects on ability to drive and use machines

There have been no studies to investigate the effect of Becam Cream on driving performance or the ability to operate machinery. A detrimental effect on such activities would not be anticipated from the adverse reaction profile of topical Becam Cream.

4.8 Undesirable effects

Adverse reactions reported for Becam cream in clinical trials were paresthesia in 1.9% of patients, and rash, edema, and secondary infection, each in 1% of patients.

The following local adverse reactions have been reported with topical corticosteroids and may occur more frequently with the use of occlusive dressings. These reactions are listed in an approximate decreasing order of occurrence: itching, irritation, dryness, folliculitis, hypertrichosis, acneiform eruptions, hypopigmentation, perioral dermatitis, allergic contact dermatitis, maceration of the skin, secondary infection, skin atrophy, striae, and miliaria. In the pediatric population, reported adverse events for Becam cream include growth retardation, benign intracranial hypertension, Cushing's syndrome (HPA-axis suppression), and local cutaneous reactions, including skin atrophy.

Systemic absorption of topical corticosteroids has produced reversible hypothalamic-pituitary-adrenal (HPA) axis suppression, manifestations of Cushing's syndrome, hyperglycemia, and glucosuria in some patients.

Adverse reactions reported with the use of clotrimazole are as follows: erythema, stinging, blistering, peeling, edema, pruritus, urticaria and general irritation of the skin.

4.9 Overdose

Amounts greater than 45g/week of Becam cream should not be used. Acute overdosage with topical application of Becam cream is unlikely and would not be expected to lead to life-threatening situation. Becam cream should not be used for longer than the prescribed time period.

Topically applied corticosteroids, such as the one contained in Becam cream can be absorbed in sufficient amounts to produce systemic effects.

5. Pharmacological properties

5.1 Pharmacodynamic properties

Cream contains the dipropionate ester of betamethasone, a glucocorticoid exhibiting the general properties of corticosteroids, and clotrimazole which is an imidazole antifungal agent. Topical corticosteroids are effective in the treatment of a range of dermatoses because of their anti-inflammatory anti-pruritic and vasoconstrictive actions. Clotrimazole is a broad-spectrum antifungal agent with activity against Trichomonas, Staphylococci and Bacteroides. Neomycin is an aminoglycoside antibiotic that primarily exerts its effect on bacterial cells by inhibiting polypeptide assembly and synthesis on the ribosome.

5.2 Pharmacokinetic properties

Cream intended for treatment of skin conditions and is applied topically. Thus there are minimal pharmacokinetic aspects related to bioavailability at the site of action.

Clotrimazole penetrates the epidermis after topical administration but there is little, if any, systemic absorption.

The extent of percutaneous absorption of topical corticosteroids is determined by many factors including vehicle, integrity of skin and use of occlusion.

Systemically absorbed topical corticosteroids are bound to plasma proteins metabolised in the liver and excreted by the kidneys. Some corticosteroids and their metabolites are also excreted in the bile.

Neomycin is poorly absorbed from the gastrointestinal tract and after topical administration an insufficient amount is absorbed to produce systemic effects. Absorption has been reported to occur from wounds and inflamed skin. After absorption neomycin is rapidly excreted by the kidneys in active form.

5.3 Preclinical safety data

There are no pre-clinical data of relevance to the prescriber which are additional to that already included in other sections of this SmPC.

6. Pharmaceutical particulars

6.1 List of excipients

White soft Paraffin BP, Light Liquid Paraffin BP, Cetosteryl Alcohol BP, Cetamacrogal 1000, Methyl Paraben BP, Propyl Paraben BP, Propylene Glycol BP, Disodium EDTA BP, Disodium hydrogen orthophosphate BP, Para Chloro meta cresol BP, Sodium dihydrogen orthophosphate BP, Titanium dioxide BP, Perfume Fragrance IH & Purified water BP.

6.2 Incompatibilities

Not applicable

6.3 Shelf life

36 Months

6.4 Special precautions for storage

Store below 30°C in a dry place. Do not freeze. Protect from light.

6.5 Nature and contents of container

Becam Cream is a white homogenous cream filled in a 30 gm printed lami tube packed in a printed carton along with leaflet.

Pack size: 1 x 10 x 30 gm.

6.6 Special precautions for disposal and other handling

Any unused product or waste material should be disposed of in accordance with local requirements.

7. Marketing authorisation holder

IBU PHARMA NIGERIA LTD.

No. 1, Labrian Street

Ikenne, Ogun State,

Nigeria

8. Marketing authorisation number(s)

BD/29

9. Date of first authorisation/renewal of the authorisation

04/01/2022

10. Date of revision of the text

16/01/2028