SUMMARY OF PRODUCT CHARACTERISTICS

1. NAME OF THE MEDICINAL PRODUCT

Betnovate Cream 0.1% w/w

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each gram of cream contains 1 mg of betamethasone (0.1% w/w) as betamethasone valerate.

Excipients with known effect:
Chlorocresol 0.1% w/w
Cetostearyl alcohol 7.2% w/w

For the full list of excipients, see section 6.1

3. PHARMACEUTICAL FORM

Cutaneous cream.
A white, homogenous, aqueous based cream.

4. CLINICAL PARTICULARS

4.1 Therapeutic indications

Betnovate Cream is a potent topical corticosteroid indicated for adults, elderly and children over 1 year for the relief of the inflammatory and pruritic manifestations of steroid responsive dermatoses. These include the following:

- Atopic dermatitis (including infantile atopic dermatitis)
- Nummular dermatitis (discoid eczema)
- Prurigo nodularis
- Psoriasis (excluding widespread plaque psoriasis)
- Lichen simplex chronicus (neurodermatitis) and lichen planus
- Seborrhoeic dermatitis
- Irritant or allergic contact dermatitis
- Discoid lupus erythematosus
- Adjunct to systemic steroid therapy in generalised erythroderma
- Insect bite reactions
- Miliaria (prickly heat)

4.2 Posology and method of administration

Posology

Adults, Elderly and Children over 1 year
Creams are especially appropriate for moist or weeping surfaces.

Apply thinly and gently rub in using only enough to cover the entire affected area once or twice daily for up to 4 weeks until improvement occurs, then reduce the frequency of application or
change the treatment to a less potent preparation. Allow adequate time for absorption after each application before applying an emollient.

In the more resistant lesions, such as the thickened plaques of psoriasis on elbows and knees, the effect of Betnovatecan be enhanced, if necessary, by occluding the treatment area with polythene film. Overnight occlusion only is usually adequate to bring about a satisfactory response in such lesions, thereafter improvement can usually be maintained by regular application without occlusion.

If the condition worsens or does not improve within 2-4 weeks, treatment and diagnosis should be re-evaluated.

**Atopic dermatitis (eczema)**

Therapy with betamethasone valerate should be gradually discontinued once control is achieved and an emollient continued as maintenance therapy.

Rebound of pre-existing dermatoses can occur with abrupt discontinuation of betamethasone valerate.

**Recalcitrant dermatoses**

*Patients who frequently relapse*

Once an acute episode has been treated effectively with a continuous course of topical corticosteroid, intermittent dosing (applying once daily, twice a week without occlusion) or transitioning to a lower strength corticosteroid may be considered. This has been shown to be helpful in reducing the frequency of relapse. Application should be continued to all previously affected sites or to known sites of potential relapse. This regimen should be combined with routine daily use of emollients. The condition and the benefits and risks of continued treatment must be re-evaluated on a regular basis.

**Administration in Children**

Betamethasone valerate is contraindicated in children under 1 year of age.

Children are more likely to develop local and systemic side effects of topical corticosteroids and, in general, require shorter courses and less potent agents than adults.

Care should be taken when using betamethasone valerate to ensure the amount applied is the minimum that provides therapeutic benefit.

**Administration in the Elderly**

Clinical studies have not identified differences in responses between the elderly and younger patients. Since renal and hepatic dysfunctions are more common in the elderly population, elimination could be reduced in the case of systemic absorption. Therefore the minimum quantity should be used for the shortest duration to achieve the desired clinical benefit.

**Administration in Renal/Hepatic Impairment**

In case of systemic absorption (when application is over a large surface area for a prolonged period) metabolism and elimination may be delayed therefore increasing the risk of systemic toxicity. Therefore the minimum quantity should be used for the shortest duration to achieve the desired clinical benefit.
4.3 Contraindications

Hypersensitivity to the active substance or to any of the excipients listed in section 6.1.

The following conditions should not be treated with betamethasone valerate:

- Untreated cutaneous infections
- Rosacea
- Acne vulgaris
- Pruritus without inflammation
- Perianal and genital pruritus
- Perioral dermatitis
- Widespread plaque psoriasis

Betamethasone valerate is contraindicated in dermatoses in infants under 1 year of age, including dermatitis

4.4 Special warnings and precautions for use

Betamethasone valerate should be used with caution in patients with a history of local hypersensitivity to corticosteroids or to any of the excipients in the preparation. Local hypersensitivity reactions (see section 4.8) may resemble symptoms of the condition under treatment.

Manifestations of hypercortisolism (Cushing’s syndrome) and reversible hypothalamic-pituitary-adrenal (HPA) axis suppression, leading to glucocorticosteroid insufficiency, can occur in some individuals as a result of increased systemic absorption of topical steroids.

If either of the above are observed, withdraw the drug gradually by reducing the frequency of application, or by substituting a less potent corticosteroid. Abrupt withdrawal of treatment may result in glucocorticosteroid insufficiency (see section 4.8).

Risk factors for increased systemic effects are:

- Potency and formulation of topical steroid
- Duration of exposure
- Application to a large surface area
- Use on occluded areas of skin (e.g. on intertriginous areas or under occlusive dressings) (in infants the nappy may act as an occlusive dressing)
- Increasing hydration of the stratum corneum
- Use on thin skin areas such as the face
- Use on broken skin or other conditions where the skin barrier may be impaired

In comparison with adults, children may absorb proportionally larger amounts of topical corticosteroids and thus be more susceptible to systemic adverse effects. This is because children have an immature skin barrier and a greater surface area to body weight ratio compared with adults.

Paediatric population

Prolonged use of uninterrupted occlusion (including nappies) or use with extensive occlusive dressing may suppress adrenocortical function.

In infants and children under 12 years of age, long-term continuous topical corticosteroid therapy should be avoided where possible, as adrenal suppression can occur.
Continuous treatment for longer than 3 weeks should be avoided in patients under the age of 3 years because of the possibility of adrenocortical suppression and growth retardation.

**Infection risk with occlusion**
Bacterial infection is encouraged by the warm, moist conditions within skin folds or caused by occlusive dressings. When using occlusive dressings, the skin should be cleansed before a fresh dressing is applied.

**Use in Psoriasis**
Topical corticosteroids should be used with caution in psoriasis as rebound relapses, development of tolerances, risk of generalised pustular psoriasis and development of local or systemic toxicity due to impaired barrier function of the skin have been reported in some cases. If used in psoriasis careful patient supervision is important.

**Application to the face**
Prolonged application to the face is undesirable as this area is more susceptible to atrophic changes.

**Application to the eyelids**
If applied to the eyelids, care is needed to ensure that the preparation does not enter the eye, as cataract and glaucoma might result from repeated exposure.

There have been a few reports in the literature of the development of cataracts in patients who have been using corticosteroids for prolonged periods of time. Although it is not possible to rule out systemic corticosteroids as a known factor, prescribers should be aware of the possible role of corticosteroids in cataract development.

**Visual disturbance**
Visual disturbance may be reported with systemic and topical corticosteroid use. If a patient presents with symptoms such as blurred vision or other visual disturbances, the patient should be considered for referral to an ophthalmologist for evaluation of possible causes which may include cataract, glaucoma or rare diseases such as central serous chorioretinopathy (CSCR) which have been reported after use of systematic and topical corticosteroids.

**Concomitant infection**
Appropriate antimicrobial therapy should be used whenever treating inflammatory lesions, which have become infected. Any spread of infection requires withdrawal of topical corticosteroid therapy and administration of appropriate antimicrobial therapy.

**Chronic leg ulcers**
Topical corticosteroids are sometimes used to treat the dermatitis around chronic leg ulcers. However, this use may be associated with a higher occurrence of local hypersensitivity reactions and an increased risk of local infection.

**Excipients - Important Information**
Betnovate Cream contains chlorocresol and cetostearyl alcohol; chlorocresol may cause allergic reactions and cetostearyl alcohol may cause local skin reactions (e.g. contact dermatitis).

Healthcare professionals should be aware that the fabric (clothing, bedding, dressings etc.) that has been in contact with this product burns more easily and is a serious fire hazard. Patients should be warned of this risk and advised not to smoke or go near naked flames - due to the risk of severe burns. Washing clothing and bedding may reduce product build-up but not totally remove it.

**4.5 Interaction with other medicinal products and other forms of interaction**
Co-administered drugs that can inhibit CYP3A4 (e.g. ritonavir, itraconazole) have been shown to inhibit the metabolism of corticosteroids leading to increased systemic exposure. The extent to which this interaction is clinically relevant depends on the dose and route of administration of the corticosteroids and the potency of the CYP3A4 inhibitor.

4.6. Fertility, pregnancy and lactation

Pregnancy
There is limited data from the use of betamethasone valerate in pregnant women. Topical administration of corticosteroids to pregnant animals can cause abnormalities of foetal development (see section 5.3).

The relevance of this finding to humans has not been established; however, administration of betamethasone valerate during pregnancy should only be considered if the expected benefit to the mother outweighs the risk to the foetus. The minimum quantity should be used for the minimum duration.

Breast-feeding
The safe use of topical corticosteroids during lactation has not been established.

It is not known whether topical administration of corticosteroids could result in sufficient systemic absorption to produce detectable amounts in breast milk. Administration of betamethasone valerate during lactation should only be considered if the expected benefit to the mother outweighs the risk to the infant.

If used during lactation, betamethasone valerate should not be applied to the breasts to avoid accidental ingestion by the infant.

Fertility
There are no data in humans to evaluate the effect of topical corticosteroids on fertility.

4.7 Effects on ability to drive and use machines

There have been no studies to investigate the effect of betamethasone valerate 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 betamethasone valerate.

4.8 Undesirable effects

Adverse reactions are listed below by MedDRA system organ class and frequency. Frequencies are defined as: very common (≥1/10), common (≥1/100 to <1/10), uncommon (≥1/1000 to <1/100), rare (≥1/10,000 to <1/1000) and very rare (<1/10,000) including isolated reports.

Post-marketing data

Infections and Infestations
Very rare Opportunistic infection

Immune System Disorders
Very rare Local hypersensitivity

Endocrine Disorders
Very rare Hypothalamic-pituitary-adrenal (HPA) axis suppression:
Cushingoid features (e.g. moon face, central obesity), delayed weight gain/growth retardation in children, osteoporosis, glaucoma, hyperglycaemia/glucosuria, cataract, hypertension, increased weight/obesity, decreased endogenous cortisol levels, alopecia, trichorrhexis

**Skin and Subcutaneous Tissue Disorders**

| Common | Pruritus, local skin burning /skin pain |
| Very rare | Allergic contact dermatitis/ dermatitis, erythema, rash, urticaria, pustular psoriasis, skin thinning* / skin atrophy*, skin wrinkling*, skin dryness*, striae*, telangiectasias*, pigmentation changes, hypertrichosis, exacerbation of underlying symptoms |

*Skin features secondary to local and/or systemic effects of hypothalamic-pituitary adrenal (HPA) axis suppression.*

**General Disorders and Administration Site Conditions**

| Very rare | Application site irritation/pain |

**Eye disorders**

Not known Vision, blurred (see also section 4.4)

**Reporting of suspected adverse reactions**

Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions via the national system below:

**ADR Reporting**

Website: www.medicinesauthority.gov.mt/adrportal

**4.9 Overdose**

**Symptoms and signs**

Topically applied betamethasone valerate may be absorbed in sufficient amounts to produce systemic effects. Acute overdosage is very unlikely to occur, however, in the case of chronic overdosage or misuse, the features of hypercortisolism may occur (see section 4.8).

**Management**

In the event of overdose, betamethasone valerate should be withdrawn gradually by reducing the frequency of application, or by substituting a less potent corticosteroid because of the risk of glucocorticosteroid insufficiency.

Further management should be as clinically indicated or as recommended by the national poisons centre, where available.

**5. PHARMACOLOGICAL PROPERTIES**

**5.1 Pharmacodynamic properties**

Pharmacotherapeutic group: Corticosteroids, potent (group III)
Mechanism of action
Topical corticosteroids act as anti-inflammatory agents via multiple mechanisms to inhibit late phase allergic reactions including decreasing the density of mast cells, decreasing chemotaxis and activation of eosinophils, decreasing cytokine production by lymphocytes, monocytes, mast cells and eosinophils, and inhibiting the metabolism of arachidonic acid.

Pharmacodynamic effects
Topical corticosteroids, have anti-inflammatory, antipruritic and vasoconstrictive properties.

5.2 Pharmacokinetic properties

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

Distribution
Because circulating levels of topical corticosteroids are well below the level of detection, it is necessary to use endpoints that assess signs of drug effect to evaluate systemic exposure.

Metabolism
Once absorbed through the skin, topical corticosteroids are handled through pharmacokinetic pathways similar to systemically administered corticosteroids. They are metabolised, primarily in the liver.

Elimination
Topical corticosteroids are excreted by the kidneys. In addition, some corticosteroids and their metabolites are also excreted in the bile.

5.3 Preclinical safety data

Carcinogenesis/Mutagenesis

Carcinogenesis
Long-term animal studies have not been performed to evaluate the carcinogenic potential of betamethasone valerate.

Genotoxicity
No specific studies have been conducted to investigate the genotoxic potential of betamethasone valerate.

Reproductive toxicity

Fertility
The effect on fertility of betamethasone valerate has not been evaluated in animals.

Pregnancy
Subcutaneous administration of betamethasone valerate to mice or rats at doses ≥0.1 mg/kg/day or rabbits at doses ≥12 micrograms/kg/day during pregnancy produced foetal abnormalities including cleft palate.
6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Chlorocresol
Macrogol cetostearyl ether
Cetostearyl alcohol
White soft paraffin
Liquid paraffin
Sodium dihydrogen phosphate dihydrate
Phosphoric acid (for pH adjustment)
Sodium hydroxide (for pH adjustment)
Purified Water

6.2 Incompatibilities

Not applicable.

6.3 Shelf life

3 years

6.4 Special precautions for storage

Do not store above 25°C.

6.5 Nature and contents of container

30gm and 100gm collapsible aluminium tubes

Not all pack sizes may be marketed

6.6 Special precautions for disposal and other handling

No special requirements.

7. MARKETING AUTHORISATION HOLDER

GlaxoSmithKline (Ireland) Limited
12 Riverwalk,
Citywest Business Campus,
Dublin 24,
Ireland

8. MARKETING AUTHORISATION NUMBER
MA192/00202

9. **DATE OF FIRST AUTHORISATION/RENEWAL OF AUTHORISATION**

12th September 2005 / 21st February 2013

10. **DATE OF REVISION OF TEXT**

30th June 2020