

**27. september 2023**

**SUMMARY OF PRODUCT CHARACTERISTICS**

**for**

**Infilea, shampoo**

**0. D.SP.NO.**

32972

**1. NAME OF THE MEDICINAL PRODUCT**

Infilea

**2. QUALITATIVE AND QUANTITATIVE COMPOSITION**

One gram of shampoo contains 500 micrograms of clobetasol propionate.

One gram of shampoo corresponds to 1 millilitre of shampoo.

Excipients with known effect

One gram of shampoo contains 100 milligrams of ethanol.

For a full list of excipients, see section 6.1.

**3. PHARMACEUTICAL FORM**

Shampoo

Viscous, translucent, colourless to pale yellow liquid shampoo with alcoholic odour.

**4. CLINICAL PARTICULARS**

**4.1 Therapeutic indications**

Topical treatment of moderate scalp psoriasis in adults.

**4.2 Posology and method of administration**

|  |
| --- |
| **Clobetasol propionate belongs to the most potent class of topical corticosteroids (Group IV) and prolonged use may result in serious undesirable effects (see section 4.4). If treatment with a local corticosteroid is clinically justified beyond 4 weeks, a less potent corticosteroid preparation should be considered. Repeated but short courses of clobetasol propionate may be used to control exacerbations (see details below).** |

Posology

Infilea shampoo should be applied directly on dry scalp once daily taking care to well cover and massage the lesions. An amount equivalent to around a half tablespoon per application is sufficient to cover all the scalp.

The total dosage should not exceed 50 g per week.

Method of administration

For cutaneous use on the scalp only.

After application, Infilea shampoo should be kept in place without covering for 15 minutes before rinsing. Hands should be washed carefully after application. After 15 minutes, the product must be thoroughly rinsed with water and/or hair can be washed by using an additional amount of regular shampoo if needed to facilitate washing. Then, hair can be dried as usual.

The treatment duration should be limited to a maximum of 4 weeks. As soon as clinical results are observed, applications should be spaced out or replaced, if needed, by an alternative treatment. If no improvement is seen within four weeks, reassessment of the diagnosis may be necessary.

Repeated courses of Infilea shampoo may be used to control exacerbations provided the patient is under regular medical supervision.

Special populations

*Elderly*

The safety and efficacy of Infilea shampoo in geriatric patients aged 65 years and above have not been established.

*Renal impairment*

Infilea shampoo has not been studied in patients with renal impairment.

*Hepatic impairment*

Patients with severe liver dysfunction should be treated with special caution and closely monitored for side-effects.

*Paediatric population*

The experience in the paediatric population is limited.

Infilea shampoo is not recommended for use in children and adolescents below 18 years of age. It is contraindicated in children under 2 years of age (see sections 4.3 and 4.4).

**4.3 Contraindications**

* Hypersensitivity to the active substance or to any of the excipients listed in section 6.1.
* Infilea shampoo must not be applied on skin areas affected by bacterial, viral (varicella, herpes simplex, herpes zoster), fungal or parasitic infections, ulcerous wounds and specific skin diseases (skin tuberculosis, skin diseases caused by lues).
* Infilea must not be applied to the eye and eyelids (risk of glaucoma, risk of cataract).
* Children under 2 years of age.

**4.4 Special warnings and precautions for use**

*Hypersensitivity*

Hypersensitivity to corticosteroids can be observed.

Therefore, clobetasol propionate, is not recommended in patients who are hypersensitive to other corticosteroids.

*Osteonecrosis, serious infections and immunosuppression*

Cases of osteonecrosis, serious infections (including necrotizing fasciitis) and systemic immunosuppression (sometimes resulting in reversible Kaposi’s sarcoma lesions) have been reported with long-term use of clobetasol propionate beyond the recommended doses (see section 4.2). In some cases, patients used concomitantly other potent oral/topical corticosteroids or immunosuppressors (e.g. methotrexate, mycophenolate mofetil). If treatment with local corticosteroids is clinically justified beyond 4 weeks, a less potent corticosteroid preparation should be considered.

*Systemic effects*

Long-term continuous therapy with corticosteroids, use of occlusive mobcaps, treatment of large surface areas especially in children, can enhance absorption and lead to a higher risk of systemic effects. In such cases, medical supervision should be increased and patients may be evaluated periodically for evidence of HPA axis suppression. Systemic absorption of topical corticosteroids induced by prolonged use especially on large surface areas has caused reversible adrenal suppression with the potential for glucocorticosteroid insufficiency, manifestations of Cushing’s syndrome in some patients. Such systemic effects resolve when treatment is stopped. However, abrupt discontinuation can lead to acute adrenal insufficiency, especially in children.

*Diabetes mellitus*

Worsening of glycaemic control in patients with diabetes mellitus may occur with systemic absorption of topical corticosteroids. Patients with uncontrolled diabetes mellitus should be treated with special caution and close monitoring of blood glucose is recommended.

*Tolerance and local toxicity*

Topical corticosteroids should be used with caution as development of tolerance (tachyphylaxis) may occur as well as local toxicity, such as skin atrophy, infection and telangiectasia of the skin.

*Other skin areas*

Infilea shampoo is only intended for the treatment of scalp psoriasis and should not be used to treat other skin areas. In particular, Infilea is not recommended for use in the face, intertriginous areas (axillae and genitoanal regions) and on other erosive skin surfaces as this could increase the risk of adverse events such as atrophic changes, telangiectasia, corticosteroid-induced dermatitis or secondary infection. The face, more than other areas of the body, may exhibit atrophic changes after prolonged treatment with potent topical corticosteroids.

*Generalised pustular psoriasis*

In rare instances, treatment of psoriasis with corticosteroids (or its withdrawal) is thought to have provoked generalised pustular psoriasis in case of intensive and prolonged topical use.

*Acne, rosacea and perioral dermatitis*

Clobetasol propionate, is not recommended in patients with acne vulgaris, rosacea or perioral dermatitis. When applied to the face, very potent corticosteroids can also induce perioral dermatitis or worsen rosacea.

*Risk of rebound or relapse*

There may be a risk of post-treatment rebound or relapse upon abrupt discontinuation of treatment with clobetasol propionate. Medical supervision should therefore continue in the post-treatment period.

*Other precautions for use*

If Infilea shampoo does enter the eye, the affected eye should be rinsed with copious amounts of water.

Patients should be instructed to use Infilea shampoo for the minimum amount of time necessary to achieve the desired results. If signs of local intolerance appear, application should be suspended until they disappear. If signs of hypersensitivity appear, application should be stopped immediately.

In order to avoid interaction with hair colour dying product, such as hair colour changes, clobetasol propionate shampoo should be thoroughly rinsed.

*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 which have been reported after use of systemic and topical corticosteroids.

*Paediatric population*

In this age group, growth retardation may also be observed in case of systemic absorption of topical corticosteroids. Infilea shampoo should not be used in children and adolescents between 2 and 18 years of age. It is contraindicated in children under 2 years of age (see section 4.3). If Infilea shampoo is used in children and adolescents below 18 years of age, the treatment should be reviewed weekly.

*Excipients*

This medicine contains 100 mg alcohol (ethanol) in each gram which is equivalent to 10 % w/w. It may cause burning sensation on damaged skin.

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

No interaction studies have been performed.

**4.6 Fertility, pregnancy and lactation**

Pregnancy

There are no adequate data from the use of topical clobetasol propionate in pregnant women. Studies in animals have shown reproductive toxicity (see section 5.3). The potential risk for humans is unknown.

Infilea shampoo should not be used during pregnancy and in women of childbearing potential not using contraception, unless clearly necessary.

Breast-feeding

Systemically administered corticosteroids pass into breast milk. Damage to the infant is not reported to date. Nevertheless, as there are no adequate data on the possible milk transfer of topical clobetasol propionate and its biological or clinical repercussions, Infilea shampoo should not be prescribed to breastfeeding women unless clearly indicated.

Fertility

No clinical data is available. See section 5.3.

**4.7 Effects on ability to drive and use machines**

No traffic warning.

Infilea shampoo has no or negligible influence on the ability to drive and use machines.

**4.8 Undesirable effects**

Summary of the safety profile

During clinical development of clobetasol propionate 500 micrograms/g shampoo, in a total of 558 patients receiving clobetasol propionate 500 micrograms/g shampoo, the most commonly reported adverse drug reaction was skin burning sensation. Its incidence was about 2.8 %. Most adverse events were rated as mild to moderate and they were not affected by race or gender. Clinical signs of skin irritation were uncommon (0.2 %). No serious drug-related adverse events were reported during any of the clinical trials.

Tabulated list of adverse reactions

The adverse reactions are classified by System Organ Class and frequency, using the following convention: Very common (≥1/10), common (≥1/100 to <1/10), uncommon (≥ 1/1.000 to <1/100), rare (≥1/10.000 to <1/1.000), very rare (<1/10.000), not known (frequency cannot be estimated from the available data) and were reported with clobetasol 500 micrograms/g shampoo in clinical studies and post-marketing (see Table 1).

**Table 1 – Adverse reactions**

|  |  |  |
| --- | --- | --- |
| **System Organ Class** | **Frequency** | **Adverse reactions** |
| Infections and infestations | Rare | Opportunistic infections(1), (2) |
| Endocrine disorders | Uncommon | Adrenal suppression(1), (3)  Cushing syndrome(1), (3) |
|  | Not known | Growth retardation in children(1), (3) (see also section 4.4)  Exacerbations in diabetes mellitus(1), (3) (see also section 4.4) |
| Eye disorders | Uncommon | Eye stinging/burning(1)  Eye irritation(1)  Ocular tight sensation  Glaucoma(1), (2), (3) |
|  | Not known | Vision, blurred(1) (see also section 4.4)  Cataract(1), (2) (where applied to eyes or eyelids) |
| Immune System disorders | Uncommon | Hypersensitivity(1) |
|  | Rare | Immunosuppression(1), (3) |
| Nervous System disorders | Uncommon | Headache |
| Skin and subcutaneous tissue disorders | Common | Skin burning sensation  Folliculitis |
|  | Uncommon | Pain of skin(1)  Skin discomfort  Pruritus  Acne  Skin oedema  Telangiectasia  Psoriasis (aggravation) (1)  Alopecia  Dry skin  Urticaria  Skin atrophy  Skin irritation(1)  Skin tightness(1)  Allergic contact dermatitis(1), erythema(1), rash(1) |
| Not known | Hypopigmentation(1), (2), pigmentation changes(1), (2)  Striae(1), (4), purpura(1), (4), generalised pustular psoriasis(1), (4) (see also section 4.4)  Pustular eruptions(1), (2)  Perioral dermatitis(1), rosacea worsening(1) (see also section 4.4)  Hypertrichosis(1), (2) |

*(1) The adverse reaction has been notified during post-marketing experience.*

*(2) In case of prolonged use.*

*(3) In case of systemic absorption.*

*(4) Although not observed with clobetasol 500 micrograms/g shampoo, they may be caused by prolonged and/or intensive treatment with potent corticosteroids preparations.*

As Infilea shampoo is to be kept in place for 15 minutes before rinsing, systemic absorption is seldom observed (see section 5.2) and therefore, the risk of appearance of HPA axis suppression is very low compared to non-rinsed potent corticosteroids products. Should HPA axis suppression occur, it is likely to be transient with a rapid return to normal values (see also section 4.4).

Rebound effects may occur upon discontinuation of treatment (see also section 4.4).

Reporting of suspected adverse reactions

Reporting suspected adverse reactions after authorization 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:

Lægemiddelstyrelsen

Axel Heides Gade 1

DK-2300 København S

Website: www.meldenbivirkning.dk

**4.9 Overdose**

Acute overdose is very unlikely to occur, however, in the case of chronic overdose or misuse, the features of hypercortisolism may appear and in this situation, treatment should be discontinued gradually. However, because of the risk of acute adrenal suppression, this should be done under medical supervision.

**4.10 Legal status**

B

**5. PHARMACOLOGICAL PROPERTIES**

**5.1 Pharmacodynamic properties**

Pharmacotherapeutic group: Corticosteroids, Very Potent (Group IV), ATC code: D07AD01.

Mechanism of action

Like other topical corticosteroids, clobetasol propionate has anti-inflammatory, antipruritic, and vasoconstrictive properties. The mechanism of the anti-inflammatory activity of topical corticosteroids in general is unclear. However, corticosteroids are thought to act by induction of phospholipase A2 inhibitory proteins, collectively called lipocortins. It is postulated that these proteins control the biosynthesis of potent mediators of inflammation such as prostaglandins and leukotrienes by inhibiting the release of their common precursor, arachidonic acid. Arachidonic acid is released from membrane phospholipids by phospholipase A2.

**5.2 Pharmacokinetic properties**

*In vitro* liberation –penetration studies on human skin showed that only a small percentage (0.1 %) of the applied dose of clobetasol propionate shampoo can be found in the epidermis (including the stratum corneum) when applied for 15 minutes and then rinsed. The very low topical absorption of clobetasol propionate from clobetasol propionate shampoo when applied according to the recommended clinical use (15 minutes before rinse off) resulted in negligible systemic exposure in animal studies and in clinical trials. Available clinical data revealed that only 1 of 126 subjects had a quantifiable clobetasol propionate plasma concentration (0.43 ng/mL).

The present pharmacokinetic data indicate that systemic effects following clinical treatment with clobetasol propionate shampoo are highly unlikely due to the low systemic exposure of clobetasol propionate after topical administration.

**5.3 Preclinical safety data**

Non-clinical data reveal no special hazard for humans based on conventional studies of safety pharmacology, single, repeated dose toxicity and genotoxicity. The carcinogenicity of clobetasol has not been studied.

In rabbits, clobetasol propionate shampoo was slightly irritating to the skin and eyes, but no delayed-type hypersensitivity was seen on guinea pigs’ skin.

In developmental toxicity studies in the rabbit and the mouse, clobetasol propionate was shown to be teratogenic when administered subcutaneously at clinically relevant doses. In a topical embryotoxicity study of clobetasol in the rat, foetal immaturity and skeletal and visceral malformations were observed at clinically relevant dose levels. In addition to malformations, studies in animals exposed to glucocorticoids during pregnancy have also shown other effects on the offspring, such as intrauterine growth retardation.

The clinical translatability of the effects of clobetasol and other corticosteroids in developmental animal studies is unknown.

**6. PHARMACEUTICAL PARTICULARS**

**6.1 List of excipients**

Ethanol

Coco alkyl dimethyl betaine

Sodium laureth sulfate

Polyquaternium-10

Sodium citrate (for pH adjustment)

Citric acid monohydrate (for pH adjustment)

Purified water

**6.2 Incompatibilities**

Not applicable.

**6.3 Shelf life**

3 years.

Shelf life after first opening: 4 weeks.

**6.4 Special precautions for storage**

Do not store above 30 ºC.

Store in the original container, in order to protect from light.

**6.5 Nature and contents of container**

Cylindrical high density polyethylene (HDPE) white bottle. The bottle is closed with a low density polyethylene (LDPE) plug and with a high density polyethylene (HDPE) white cap.

Pack sizes: 125 ml.

Not all pack sizes may be marketed.

**6.6 Special precautions for disposal and other handling**

No special requirements.

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

**7. MARKETING AUTHORISATION HOLDER**

Egis Pharmaceuticals PLC

Kereszturi Ut 30-38

1106 Budapest X

Budapest

Ungarn

**8. MARKETING AUTHORISATION NUMBER(S)**

67698

**9. DATE OF FIRST AUTHORISATION**

27. september 2023

**10. DATE OF REVISION OF THE TEXT**

-