

Oral bioavailability is less than 1%. Ciclesonide and its active metabolite are extensively bound to plasma proteins. It is further metabolised to inactive metabolites via the cytochrome P450 isoenzyme CYP3A4. After oral or intravenous dosage, ciclesonide is mainly excreted via the faeces.

References

- Rohatagi S, et al. Population pharmacokinetics and pharmacodynamics of ciclesonide. *J Clin Pharmacol* 2003; **43**: 365–78.
- Nave R, et al. Pharmacokinetics of [¹⁴C]ciclesonide after oral and intravenous administration to healthy subjects. *Clin Pharmacol Ther* 2004; **43**: 479–86.
- Derendorf H. Pharmacokinetic and pharmacodynamic properties of inhaled ciclesonide. *J Clin Pharmacol* 2007; **47**: 782–9.

Uses and Administration

Ciclesonide is a corticosteroid with glucocorticoid activity (p.1490). It is used by inhalation in the management of asthma (p.1108) in adults and adolescents aged 12 years and older. The usual dose is 160 micrograms once daily from a metered-dose aerosol; the dose may be reduced to 80 micrograms once daily for maintenance. It is preferably given in the evening. Ciclesonide is given intranasally for the treatment of seasonal and perennial allergic rhinitis (p.565) in adults and adolescents 12 years of age and older; children 6 years of age and older may be treated for seasonal allergic rhinitis. A dose of 200 micrograms once daily is given as 2 sprays of 50 micrograms into each nostril.

References

- Postma DS, et al. Treatment of asthma by the inhaled corticosteroid ciclesonide given either in the morning or evening. *Eur Respir J* 2001; **17**: 1083–8.
- Reynolds NA, Scott LJ. Ciclesonide. *Drugs* 2004; **64**: 511–19.
- Christie P. Ciclesonide: a novel inhaled corticosteroid for asthma. *Drugs Today* 2004; **40**: 569–76.
- Chapman KR, et al. Maintenance of asthma control by once-daily inhaled ciclesonide in adults with persistent asthma. *Allergy* 2005; **60**: 330–7.
- Dhillon S, Wagstaff AJ. Ciclesonide nasal spray: in allergic rhinitis. *Drugs* 2008; **68**: 875–83.

Preparations

Proprietary Preparations (details are given in Part 3)

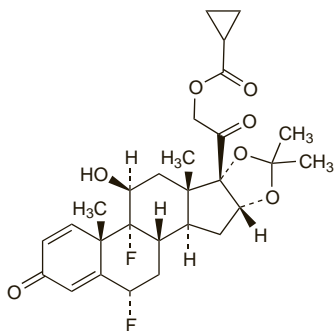
Arg.: Alvesco; **Cilex:** Alvesco; **Austral.:** Alvesco; **Braz.:** Alvesco; **Chile:** Alvesco; **Cz.:** Alvesco; **Ger.:** Alvesco; **Amavio:** Freath; **Hong Kong:** Alvesco; **Hung.:** Alvesco; **India:** Osionide; **Irl.:** Alvesco; **Malaysia:** Alvesco; **Mex.:** Alvesco; **Neth.:** Alvesco; **Pol.:** Alvesco; **S.Afr.:** Alvesco; **UK:** Alvesco; **USA:** Alvesco; **Omnia:** Alvesco.

Ciprociconide (USAN, rINN) ⓧ

Ciprociconida; Ciprociconidum; RS-2386. (6 α ,11 β ,16 α)-21-[(cyclopropylcarbonyloxy)-6,9-difluoro-11-hydroxy-16,17-[(1-methylethylidene)-bis(oxy)]-pregna-1,4-diene-3,20-dione.

Ципроциконид

$C_{28}H_{34}F_2O_7 = 520.6$
CAS — 58524-83-7.



Profile

Ciprociconide is a derivative of fluciclonide acetone (p.1531) that has been applied topically with fluciclonide and proclonide in the management of various skin disorders.

Clobetasol Propionate (BANM, USAN, rINN) ⓧ

CCI-4725; Clobetasol, propionate de; Clobetasoli propionas; GR-2/925; Klobetasol-propionát; Klobetasol Propiionat; Klobetazolu propionian; Propionat de clobetasol. 21-Chloro-9 α -fluoro-11 β ,17 α -dihydroxy-16 β -methylpregna-1,4-diene-3,20-dione 17-propionate.

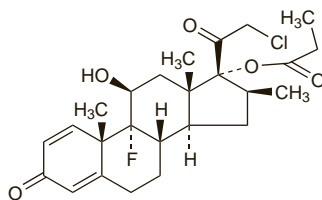
Клобетазола Пропионат

$C_{25}H_{32}ClFO_5 = 467.0$

CAS — 25122-41-2 (clobetasol); 25122-46-7 (clobetasol propionate).

ATC — D07AD01.

ATC Vet — QD07AD01.



Pharmacopoeias. In *Chin.*, *Eur.* (see p.vii), and *US*.

Ph. Eur. 6.2 (Clobetasol Propionate). A white or almost white, crystalline powder. Practically insoluble in water; sparingly soluble in alcohol; freely soluble in acetone. Protect from light.

USP 31 (Clobetasol Propionate). A white to cream crystalline powder. Practically insoluble in water; sparingly soluble in dehydrated alcohol; soluble in acetone, in chloroform, in dimethyl sulfoxide, in dioxan, and in methyl alcohol; slightly soluble in benzene and in ether. Store in airtight containers. Protect from light.

Profile

Clobetasol propionate is a corticosteroid used topically for its glucocorticoid activity (p.1490) in the treatment of various skin disorders. It is usually used as a cream, ointment, gel, scalp application, or foam containing 0.05%.

When applied topically, particularly to large areas, when the skin is broken, or under occlusive dressings, corticosteroids may be absorbed in sufficient amounts to cause systemic effects (p.1490). The effects of topical corticosteroids on the skin are described on p.1492. For recommendations concerning the correct use of corticosteroids on the skin, and a rough guide to the clinical potencies of topical corticosteroids, see p.1497.

References

- Campisi G, et al. A new delivery system of clobetasol-17-propionate (lipid-loaded microspheres 0.025%) compared with a conventional formulation (lipophilic ointment in a hydrophilic phase 0.025%) in topical treatment of atrophic/erosive oral lichen planus: a phase IV, randomized, observer-blinded, parallel group clinical trial. *Br J Dermatol* 2004; **150**: 984–90.
- Jarratt M, et al. Clobetasol propionate shampoo 0.05%: a new option to treat patients with moderate to severe scalp psoriasis. *J Drugs Dermatol* 2004; **3**: 367–73.
- Reygagne P, et al. Clobetasol propionate shampoo 0.05% and calcipotriol solution 0.005%: a randomized comparison of efficacy and safety in subjects with scalp psoriasis. *J Dermatol Treat* 2005; **16**: 31–6.
- Breneman D, et al. Clobetasol propionate 0.05% lotion in the treatment of moderate to severe atopic dermatitis: a randomized evaluation versus clobetasol propionate emollient cream. *J Drugs Dermatol* 2005; **4**: 330–6.
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- Reid DC, Kimball AB. Clobetasol propionate foam in the treatment of psoriasis. *Expert Opin Pharmacother* 2005; **6**: 1735–40.
- Sanchez Regana M, et al. Treatment of nail psoriasis with 8% clobetasol nail lacquer: positive experience in 10 patients. *J Eur Acad Dermatol Venereol* 2005; **19**: 573–7.
- Conrotto D, et al. Ciclosporin vs. clobetasol in the topical management of atrophic and erosive oral lichen planus: a double-blind, randomized controlled trial. *Br J Dermatol* 2006; **154**: 139–45.
- Vena GA, et al. Clobetasol propionate 0.05% in a novel foam formulation is safe and effective in the short-term treatment of patients with delayed pressure urticaria: a randomized, double-blind, placebo-controlled trial. *Br J Dermatol* 2006; **154**: 353–6.

Preparations

BP 2008: Clobetasol Cream; Clobetasol Ointment;
USP 31: Clobetasol Propionate Cream; Clobetasol Propionate Ointment; Clobetasol Propionate Topical Solution.

Proprietary Preparations (details are given in Part 3)

Arg.: Cantril; **Clobesol;** Clobex; **Dermaclab;** Dermadex; **Demexane;** Perfarcort; **Ribatra;** Salac; **Austria:** Dermovate; **Belg.:** Dermovate; **Braz.:** Clob-X; **Clobesol;** Cortalen C; **Demacare;** Propiosol; **Psorex;** Psorin; **Therapso;** **Canad.:** Clobex; **Dermasonef;** **Dermovate;** **Chile:** Alticort; **Clob-**

Xi; Clodavan; **Cortopic;** **Dermovate;** **Konidem;** **Lobevatef;** **Xinder. Cz.:** Clobex; **Dermovate. Demm.:** Dermovate; **Fin.:** Dermovate; **Fr.:** Dermovate; **Ger.:** Clobegalen; **Demoxin;** **Dermoxinal;** **Karison. Gr.:** Butavate; **Clarelux;** **Rubocort. Hong Kong:** Clobasol; **Clobesol;** **Clobex;** **Dermasonef;** **Derma;** **Dermovate;** **Dhabesol;** **Eurobetasol;** **Medodermone;** **Uniderm; Hung.:** Clobasol; **Clobesol. India:** Clobesol; **Lobate. Tenovate. Topifort. Indon.:** Bersol; **Closol. Dermovate. Elopro. Formid. Kadern. Klodern. Klonat. Lamodex. Lotasbat. Primadernm. Psoriderm. Irl.:** Dermovate; **Israel:** Dermovate; **Ital.:** Clobesol; **Malaysia:** Betasolf; **Clobet. Clobem; Dermaprof; Dermosol. Dermovate. Dhabesol. Lobesolf; Uniderm. Univatef. Mex.:** Clobesol; **Dermatovate; Lobevate. Neth.:** Clarelux; **Clobex; Dermovate. Oluxf; Norw.:** Dermovate; **NZ:** Dermol; **Philipp.:** Clonate; **Clobem; Dermovate. Glevate. Pol.:** Clobederm; **Dermiklobal; Dermovate. Novate. Port.:** Clarelux; **Dermovate. Etrivex. Rus.:** Dermovate (Дермовейт); **S.Afr.:** Dermovate; **Dovate; Xenovate. Singapore:** Clobesol; **Cloderm; Dermosol. Dermovate. Dhabesol. Medodermone. Powercort. Uniderm. Univate. Spain:** Dermovate; **Decloban. Swed.:** Dermovate; **Switz.:** Dermovate; **Thai.:** Betasol; **Clinoderm; Clobasone. Clobet. Clobetate. Cloderm; Clonovate. Cotaso. Demasilf; Dermovate. Medodermonef. P-Vate. Stivate. Uniderm. Turk.:** Dermovate; **Psoderm; Psovate. UAE:** Gamavate; **UK:** Clarelux; **Dermovate. Etrivex. USA:** Clobex; **Cormax; Embeleaf; Olux; Dermovate. Venez.:** Dermovate.

Multi-ingredient. Arg.: Clobesol; **Clobesol LA;** **Dermadex NN; India:** Cloderm GM; **Lobate-G; Lobate-GL; Lobate-M; Tenovate G; Tenovate M; Philipp.:** Dermovate-NN; **Port.:** Dermovate-NNf; **Switz.:** Dermovate-NN; **UK:** Dermovate-NN.

Clobetasone Butyrate (BANM, USAN, rINN) ⓧ

Butirato de clobetasona; CCI-5537; Clobetasone, butyrate de; Clobetasoni Butiras; Clobetasoni butyras; GR-2/1214; Klobetasonbutyrat; Klobetason-butyrát; Klobetasonbutyraatti; Klobetazon Bütirat; Klobetazon-butirát; Klobetazono butiratas. 21-Chloro-9 α -fluoro-17 α -hydroxy-16 β -methylpregna-1,4-diene-3,11,20-trione 17-butyrate.

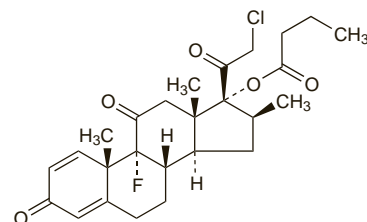
Клобетазона Бутират

$C_{26}H_{32}ClFO_5 = 479.0$

CAS — 54063-32-0 (clobetasone); 25122-57-0 (clobetasone butyrate).

ATC — D07AB01; S01BA09.

ATC Vet — QD07AB01; QS01BA09.



Pharmacopoeias. In *Eur.* (see p.vii).

Ph. Eur. 6.2 (Clobetasone Butyrate). A white or almost white powder. Practically insoluble in water; slightly soluble in alcohol; freely soluble in acetone and in dichloromethane. Protect from light.

Profile

Clobetasone butyrate is a corticosteroid used topically for its glucocorticoid activity (p.1490) in the treatment of various skin disorders. It is usually used as a cream or ointment containing 0.05%. When applied topically, particularly to large areas, when the skin is broken, or under occlusive dressings, corticosteroids may be absorbed in sufficient amounts to cause systemic effects (p.1490). The effects of topical corticosteroids on the skin are described on p.1492. For recommendations concerning the correct use of corticosteroids on the skin, and a rough guide to the clinical potencies of topical corticosteroids, see p.1497.

Clobetasone butyrate is also used for inflammatory eye disorders, as eye drops containing 0.1%. Prolonged use of ophthalmic preparations containing corticosteroids has caused raised intraocular pressure and reduced visual function.

Preparations

BP 2008: Clobetasone Cream; Clobetasone Ointment.

Proprietary Preparations (details are given in Part 3)

Arg.: Eumovate; **Austria:** Emovate; **Belg.:** Eumovate; **Braz.:** Eumovate; **Canad.:** Emovate; **Chile:** Eumovate; **Demm.:** Emovate; **Fin.:** Emovate; **Ger.:** Emovate; **Gr.:** Rettavate; **Hong Kong:** Eumovate; **India:** Eumovate; **Irl.:** Eumovate; **Israel:** Eumovate; **Ital.:** Clobet; **Eumovate. Visucloben. Malaysia:** Cortoftal; **Eumovate. Euvaderm; U-Closone. Neth.:** Emovate; **Norw.:** Cloptison; **NZ:** Eumovate; **Port.:** Emovate; **S.Afr.:** Eumovate; **Singapore:** Amisol; **Eumovate. Spain:** Cortoftal; **Eumovate. Swed.:** Emovate; **Switz.:** Emovate; **Thai.:** Eumovate; **Turk.:** Eumovate; **UK:** Eumovate; **Venez.:** Eumovate.

Multi-ingredient. Arg.: Cloptison-Nf; **India:** Eumovate-G; **Eumovate-M; Israel:** Cloderm-C; **Ital.:** Visucloben Antibiotic; **Visucloben Decongestonant; UK:** Trimovate.