

Care
Creations™

Beauty
Creations

Sebaryl™

Bioregulator of sebaceous secretion

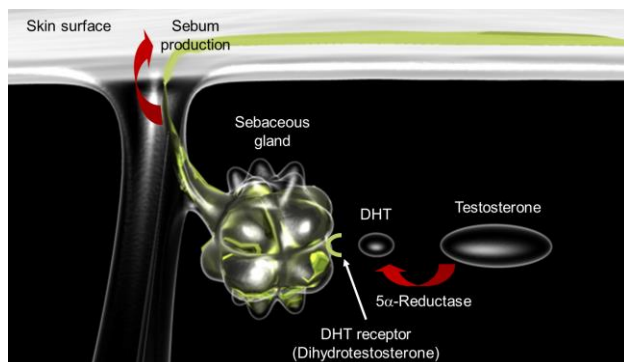
Skin Care

BASF

We create chemistry

The role of sebum for oily skin

Sebum is a substance produced by sebaceous glands, consisting mainly of triglycerides, wax esters and squalane. The activity of sebaceous glands is modulated by psychic, nervous, neurovegetative and hereditary influences as well as related to lifestyle; for instance overly strong detergent may have a worsening effect. Sebaceous secretion is mainly controlled by sexual androgens in both men and women, by testosterone, dehydroepiandrosterone and androstane diols. The sebaceous glands are triggered to produce sebum by the hormone DHT (dihydroxytestosterone), which is formed from testosterone under the influence of the enzyme 5 α -reductase.



Sebum plays an important role in maintaining skin health. Under normal conditions, sebum is only produced in such amounts needed to adequately lubricate and protect skin and hair. When there is an overproduction of DHT, or in case of an increased sensitivity of the sebaceous glands to DHT, sebum is produced excessively, resulting in oily, shiny skin. Oily skin is also more susceptible to clogged pores, blackheads and acne breakouts.

Definition / composition

Sebaryl™ contains amino acids and sulfo-peptides from yeast as well as zinc salt for sebum regulation, caffeine and B vitamins to reduce lipogenesis, anti-inflammatory horse chestnut extract and a licorice derivative to help emulsify excess sebum on the skin. Sebaryl™ bio-regulates sebaceous secretion by inhibiting 5 α -reductase, and additionally acts on other levels to control sebum production and reduce the shiny appearance of oily skin.

Sebaryl™ does not cause any reaction such as sebaceous hypersecretion or have a rebound effect.

Brief Overview: Sebaryl™ FL LS 9088



INCI: Aqua (and) Niacinamide (and) Faex Extract (and) Aesculus Hippocastanum Seed Extract (and) Ammonium Glycyrrhizate (and) Panthenol (and) Propylene Glycol (and) Zinc Gluconate (and) Caffeine (and) Biotin

China registration: INCI name is listed in "Inventory of Existing Cosmetic Ingredient in China 2015" (IECIC 2015). CAS number is listed (or exempted) in "Inventory of Existing Chemical Substances in China 2013" (IECSC 2013).

Appearance: Limpid pale yellow aqueous liquid with a weak odor

Preservative: Phenoxyethanol

Recommended dosage: 5 %

Mode of incorporation: Sebaryl™ is incorporated into the cosmetic product below 50°C, during the finishing process or at room temperature for cold processing. Suitable pH 5 to 8.

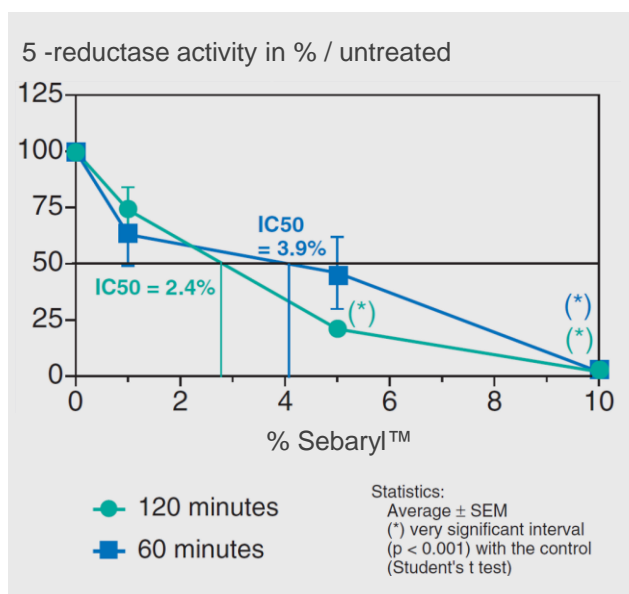
Efficacy

Inhibition of 5 α -reductase (*in vitro*)

Protocol

The effect of Sebaryl™ (1-10%) was evaluated on cultures of human fibroblasts containing 5 α -reductase type I. The inhibition of 5 α -reductase was evaluated by measuring testosterone (substrate of 5 α -reductase) metabolized per μ g DNA per hour.

Results



Conclusion

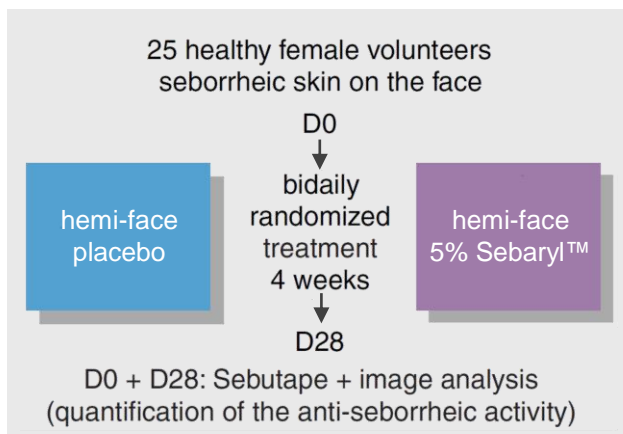
Sebaryl™ significantly inhibits 5 α -reductase type I starting at a 5% dosage; this effect increases with the duration of the treatment. IC₅₀ = 2.4% at 120 minutes

Seboregulating effect (clinical study)

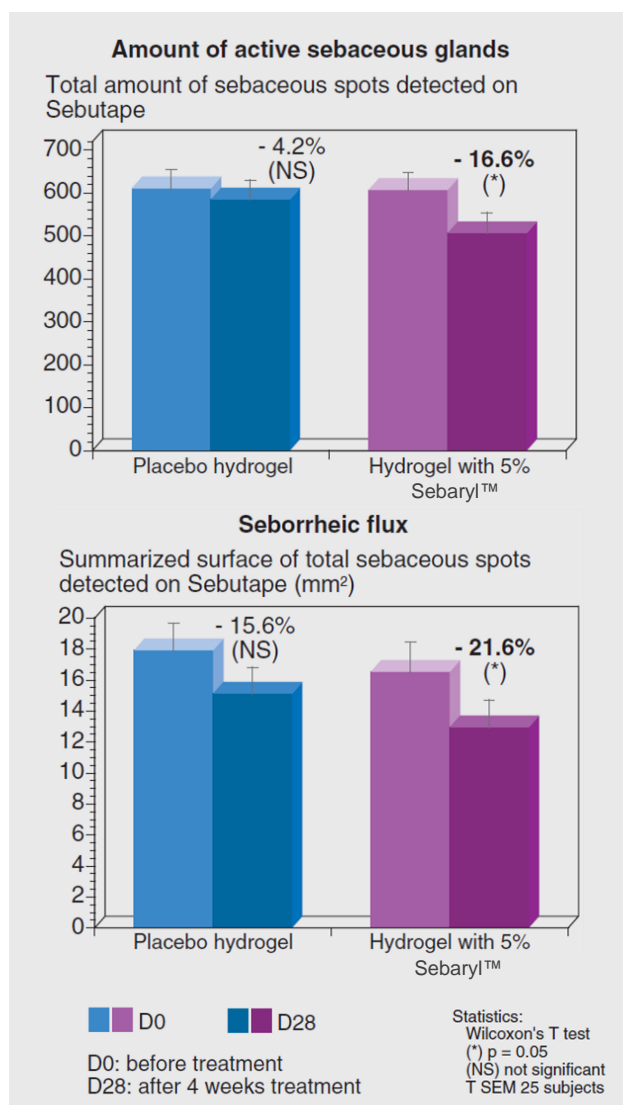
Aim

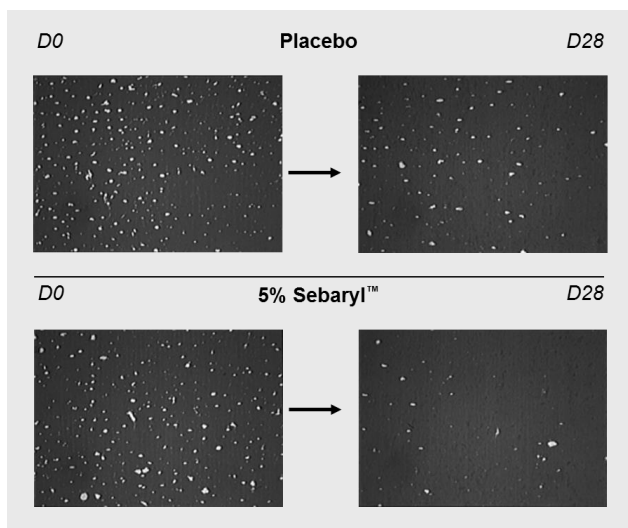
Comparison of the efficacy of a hydrogel containing 5% Sebaryl™ for the treatment of oily skin having seborrhic and acneic tendencies, versus placebo.

Protocol



Results





Conclusion

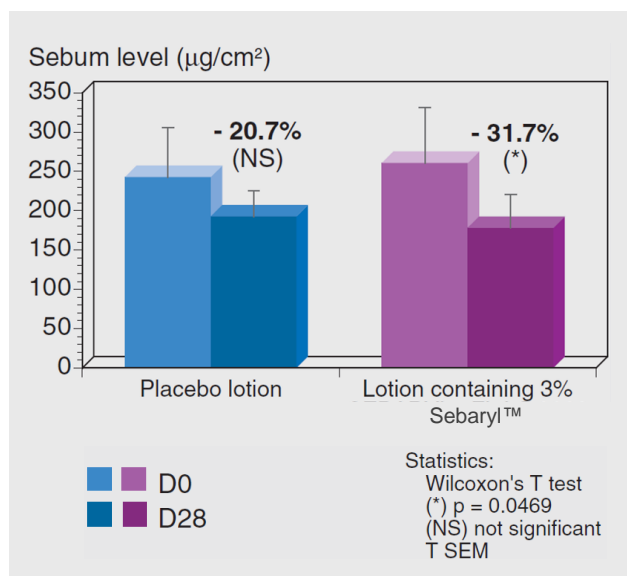
Only the hydrogel containing 5% Sebaryl™ showed a significant anti-seborrheic activity with a decrease of the amount of active sebaceous glands, and of the seborrheic flux. The placebo hydrogel did not have such an activity.

Anti-seborrheic activity on scalp (clinical study)

Protocol



Results



Conclusion

A hair lotion containing 3% Sebaryl™ showed a significant anti-seborrheic activity on the scalp after a 4 week treatment. In the same experimental conditions, the placebo did not have such an effect.

Publisher

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