



**PHARCOS**

Innovation &  
Dermatology



# PHARCOS

Innovation &  
Dermatology

*Since 1986, we have been helping our customers by searching for innovative solutions.*

The name PHARCOS is a contraction of two words, “pharma” and “cosmetics”, anticipating what is now commonly referred as “cosmeceuticals”.

Historically, PHARCOS was the trademark of BIODUE S.p.A., which was founded in 1986 by Sion Fulvio Benedetti, the current Honorary Chairman of the company.

Today, Biodue is a highly sophisticated industry from the technological point of view in the production of cosmetics, food supplements and medical devices.

Over the years, through our team of high-level information scientists, which includes 40 exclusive agents, the company has achieved a wide dissemination of the

PHARCOS line in the field of dermatological prescription.

Starting in Italy, it advanced the usage in dermatological practice of molecules that are now widely used, like essential fatty acids omega-6, glycolic acid, beta-sitosterol, kojic acid, and DNA repair enzymes.

The acquisition of thorough knowledge of the national dermatology sector, combined with a noteworthy capacity for innovation in its formulations and the achievement of the highest quality standards for this type of production has enabled its national affirmation and the spread of PHARCOS worldwide.

# FOTOKER®

## *Liposomal Photolyase 1%*

Prevention and immediate repair of photoinduced DNA damage (Light CPDs) and reduction of apoptosis induced by UVB

## *Tripeptide-33*

UVA-induced indirect DNA damage prevention (CPDs)

## *Vitamin E*

Inhibition CPDs formation

## *Selective sunscreens*

Photoprotection

### **Indications:**

#### *primary prevention:*

- biotypes at risk
- photoallergic
- DNA disorders based on genetics
- professionally exposed
- photoageing

#### *secondary prevention:*

- actinic keratosis
- treatment with pdt
- tendency to basalomas

Medical Device  
CE



*Integrated molecular protection for actinic damage control*

## CLINICAL DATA

A randomised trial which involved 30 patients with actinic keratosis was conducted for a six-month treatment period. The results showed that patients treated with Fotoker presented a significant quantitative variation of fluorescence (-23% in the red spectrum). This variation, not observed in the group treated with filter only, is suggestive of a qualitative and quantitative variation on field cancerisation following treatment with repair enzymes.



### **"Clinical effects of Fotoker Vs. SPF=50 on field cancerisation in patients with actinic keratosis"**

We performed the 1st clinical trial on the efficacy protective of photoliasis using a protocol that faithfully simulates the effect of solar radiation on human skin through repeated irradiation for 4 consecutive days: Fotoker® (SPF 50 with 1% photoliasis) reduced the formation of CPDs by 93% and apoptosis by 82%, resulting significantly better than SPF 50 alone (-62% and -40%). In addition, Fotoker® can also protect DNA against UVA radiation.

**"Reduction of DNA damage and apoptosis induced in human skin by ultraviolet radiation by topical application of a cream containing photoliasis, a DNA repair enzyme" - (Enzo Emanuele, Marco Bertona, Karmela Altabas, Velimir Altabas, Enzo Berardesca) - Mol Med Rep 2012; 5:570-4.**

**Fotoker® leaves a protective film on the skin that can prevent the appearance of DNA damage caused by UV rays that predispose to various forms of skin cancer, thanks also to the presence of photoliasis and tripeptide.**

**How to use:** Apply generously on photoexposed areas.

**Recommended frequency of use:** The product contains broad-spectrum photoprotective sunscreens. Apply 30 minutes before sun exposure and reapply every two hours in case of prolonged exposure.

FOTOKER®

## "Primary prevention in risky phototypes and in patients with actinic keratosis"

**PHOTOLYASES:** photoliasis is a monomeric flavoenzyme with a molecular weight of 50-60 kDa capable of repairing the damage caused by exposure to UVB. This enzyme is present in all living organisms exposed to sunlight, with the only exception of placental mammals, including humans. The photoliasis extracted from *Anacystis nidulans* and - in liposomal formulation - is able to effectively repair thymine dimers (or CPDs) by means of a catalytic photocycle, called photoreactivation, which uses the energy of visible light in the blue spectrum.

**TRYPEPTIDE 33:** diaminopropionyl tripeptide-33 has a significant photoprotective effect on cutaneous cells by reducing reactive oxygen species (ROS); in fact, it is able to defend them from the indirect oxidative damage induced to DNA by UVA rays: the comet assay performed on human melanocytes showed that the cells pretreated with the tripeptide undergo, after irradiation with UVA, a DNA damage significantly lower than those treated. This dose-dependent protection can reduce the damage by up to 36%.

**VITAMIN E:** la Vitamina E è una vitamina liposolubile che agisce come potente antissidante proteggendoci contro i danni prodotti dai radicali liberi, ma anche dai raggi UV inibendo la formazione di CPDs.

### **SELECTIVE SUNSCREENS**

**METHOXYCINNAMATE:** Liposoluble, safe and effective UVB filter with an absorbance between 250 and 360 nm. The maximum absorption is at 310 nm. It also absorbs short-wavelength UVAs.

**TINOSORB S (Bis-Ethylhexyloxyphenol Methoxyphenyl Triazine):** Liposoluble UVA/UVB solar filter with the highest broad-spectrum absorption capacity. Exceptionally photo-stable and safe in use. It works by dissipating UV energy and converting it to heat by electronic excitation. It has a booster action (increases SPF) and stabilises the sunscreens that act primarily in the UVB region (e.g. EHMC) and, in combination with Tinosorb M, blocks out most UVA radiation.

**BUTYL METHOXY DIBENZOYLMETHANE:** UVA chemical filter with maximum absorption at a wavelength of 355 nm.

**TINOSORB M (Methylene Bis-Benzotriazolyl Tetramethylbutylphenol):** hydrophilic microfine UVA filter that represents

a new class of UV absorbers, combining the properties of organic and inorganic filters. It has triple protection action against ultraviolet radiation: absorption, reflection and scattering (energy dissipation). Completely photostable in the UVA field, especially if long, stabilises and makes the absorption of EHMC type UVB filters more effective. The use of the two Tinosorb is ideal for offering complete UV protection in both phases of the emulsion (M in the aqueous phase, S oily).

**OCTOCRYLENE:** UVB chemical filter with maximum absorption at a wavelength of 302 nm.



Airless bottle of 50 ml

# Liposkin<sup>®</sup> *pro*

*Lactobacillus rhamnosus SP1*

**Gut-skin axis adjustment**

**Reduction of insulin resistance**

**Protection against intestinal dismicrobism induced by antibiotics and retinoids**

*Lactoferrin*

**Antimicrobial action against P. acnes**

*Nicotinamide*

**Antiinflammatory activity**

**Indications:**

- Adult and juvenile acne
- Acne caused by dietary imbalance
- Acne treated with antibiotics and retinoids

(GLUTEN  
FREE\*)



*Specific probiotic adjuvant in anti-acne therapy*

## CLINICAL DATA



The study of the biomolecular effects of Liposkin®Pro on the gene expression of the skin of acneic subjects that took the supplement for 40 days showed that the product potentiates the action of isotretinoin thanks to the seboregulatory effects of the probiotic and notable anti-inflammatory effects due to nicotinamide and lactoferrin. ***“Probiotics and acne: an immunodermatological study of the gene expression following the assumption of LiposkinPro” - E. Emanuele et al. - 09/2012.***

Lactobacillus Rhamnosus SP1 normalizes the gene expression of the skin implicated in insulin resistance and improves late onset acne. ***“Supplementation with Lactobacillus Rhamnosus SP1 normalises skin expression of genes implicated in Insulin signalling and improves adult acne” - E. Emanuele et al. - Beneficials Microbes, Sept. 2016***

***Liposkin® Pro is a food supplement containing Lactobacillus rhamnosus, Lactoferrin and Nicotinamide that contributes to the normalization of the skin surface.***

**Recommended daily dose:** one vial a day  
lontano dai pasti.  
Do not increase the recommended dose.

**Dosage frequency recommended:** bimestrial cycles.

**“The first study of the beneficial bio-molecular effects of a probiotic in acne”**

**LACTOBACILLUS RHAMNOSUS SP1:** Lactobacillus Rhamnosus SP1 is an analogue of Lactobacillus rhamnosus GG one of the most widely studied probiotic, regulates the gut-skin axis and it acts through the metabolic mechanisms (IGF 1 and FOXO1 transcription factors) with a mode of action similar to isotretinoin resulting in a sebo regulatory action and a regulation of the insulin signalling that complements the action of Lactoferrin and Nicotinamide also present in Liposkin Pro. 

**LACTOFERRIN:** Lactoferrin (LF) is a monomeric glycoprotein with a weight of approx 80KDa ,belonging to the transferrine class with two binding sites for iron in the ionic form. It was initially identified in human and bovine milk but it has shown to be present in plasma and in small amounts in many mucous secretions such as saliva and tears. LF is a very versatile polyfunctional protein with multiple biological effects: it has antimicrobial action against a broad range of microorganisms ( bacteria, viruses, fungi and parasites) and also has anti inflammatory, anti tumor and immunomodulating properties. These actions are made possible by its ability to chelating iron through direct interaction with cellular components of both the host and the pathogens. Furthermore, like other microbial peptides it is suggested that LF may also influence cytokine release through a direct action on immune cells through specific binding sites.

**NICOTINAMIDE:** Nicotinamide is one of the 2 major forms of Vitamin B complex( the other being nicotinic acid) is also known as nicotinic acid amide, Vitamin B3 and Vitamin PP. It is involved in a vast number of biological processes including energy production, fatty acid , cholesterol and steroid production, transduction of signals and maintenance of genome integrity. It exerts its antiinflammatory actions through inhibition of various pro inflammatory cytokines including NF-k, IL-12 and TNF-alpha.

15 vials of 10 ml  
with REWCAP

**Liposkin® pro**

# Liposkin<sup>®</sup> mask

## *Myoinositol*

Normalization of the local changes induced by hyperandrogenism and insulin resistance

## *Extremosio<sup>®</sup>*

Inhibition of the mTOR signalling

### **Indications:**

- Juvenile acne
- Late onset acne
- All forms of papulo-pustulent acne

Medical Device



*The first facial peel-off that “cancels” the sign of acne*

## CLINICAL DATA



The results demonstrated a significant reduction of the comedonal and inflammatory lesions as well as the sebaceous secretions; the variations of the levels of androgens and estrogens in the lesioned areas demonstrated that the hyperandrogenism in LOA may be a local phenomenon due to pilosebaceous enzymatic alterations. Beclin-1 levels, a marker of the autophagic process was significantly increased.

***“A peel-off facial mask comprising myoinositol and trehalose-loaded liposomes improves adult female acne by reducing local hyperandrogenism and activating autophagy” - E. Emanuele, G. Fabbrocini, C. Capasso, M. Donnarumma e G. Monfrecola - J. Cosmetic Dermatology - March 2017***

*Liposkin® Mask is indicated for the treatment of acne in particular for papulo-pustulent acne, as a coadjuvant in the normalization and repair processes of the skin. Liposkin® Mask, in virtue of the presence of PVA, forms a peel-off mask that protects the acneic skin from external infections and due to the particular polysaccharide used, helps the process of normalization by creating an optimal environment for the repair processes of the acneic lesions. Furthermore, the presence of Extremosio® (trehalose-loaded liposomes) effectively hydrates the skin restoring a sensation of cutaneous well-being.*

**Instructions for use:** Following cleaning of the areas to be treated through use of specific detergents for acneic lesions and following drying the face, open on sachet and apply on the face especially on the afflicted areas. Remove after at least 1h. Product should be applied once a day on alternate days and treatment should be continued at least for one month. Utilize appropriate quantities present in the sachet for forming a homogeneous mask and do not reutilize any residue.

**Dosage frequency recommended:** 60 days of treatment for 2 cycles a year or once weekly treatment for maintenance therapy.

**“Contrasts peripheral hyperandrogenism in the acneic patient”**

**MYOINOSITOL:** in literature its usage in the oral form is well documented for effectively treating hyperandrogenism and insulino-resistance. Given topically, it most probably acts as an inhibitor of specific cytochromes contrasting and normalizing the local hyperandrogenism. 

**EXTREMOSIO®:** A multi lamellar liposome loaded with trehalose significantly increases beclin-1 levels, the marker of autophagy. This has indirect effects also on the mTOR (mammalian target of rapamycin) signalling which is responsible for the hypertrophy of the sebaceous glands.

*The expression of mTOR at the skin is particularly increased in acneic areas (Experimental Dermatology – 2016, G. Monfrecola et al).*

15 sachets containing 5 ml

**Liposkin® mask**

# Liposkin<sup>®</sup> cream

## *7-dehydrocholesterol*

**Remoduling of the extracellular dermal matrix**  
**Activation of antimicrobial peptides**

## *Niacinamide*

**Reduction of proinflammatory cytokines**  
**Improvement of the cutaneous barrier function**

## *Retinol*

**Regulation of the differentiation of keratinocytes**

- Treatment of mild to moderate acne
- Adjunctive in severe acne in therapy with retinoids
- Prevention of miccomedones in summer
- Prevention of acne in the puberty phase
- In cases of familiarity and treatment of late onset acne (Adult Onset Acne)
- Long term maintenance therapy following anti acne treatment



*Reduction of the inflammation and risk of scarring due to acne*

## CLINICAL DATA



In the first biomolecular study, carried out in vivo, the effects of the topical application of the product on the gene expression of the skin of acneic patients was evaluated: in 45 days of treatment Liposkin® Cream was shown to be able to positively modulate four distinct biological pathways involved in the inflammation and in the scarring. **“Study of the profile of the gene expression induced following the topical application of Liposkin® cream on the skin of acneic patients” - E. Emanuele et al. - 2011.**

In a second clinical study with Liposkin® Cream in the treatment of acne with retinoids, the product in combination with topical tretinoin induced a significative improvement of the pathology already after 30 days and also a significant reduction of the irritation caused by the drug. **“Strategies for improving the therapy adherence in acne” - G. Fabbrocini et al. - European journal of acne and related diseases. 09/2012.**

*Evanescent cream for skin with an acneic tendency with nicotinamide 4% to minimize the cutaneous manifestations; retinol that brings a purifying action and provitamin D for an antimicrobial effect. It is not greasy and it may also be used as a base for make up as it is opaque. Does not contain perfume and it is anti-comedogenic. Continued usage of the product can improve the patient compliance to pharmacological treatment.*

**Mode of use:** apply daily to the clean and dry face.

**Dose for single application:** 5 cm of the cream (approx 0.4ml) may cover the facial surface.

**Dosage frequency:** 1-2 times a day morning and/or evening.

**“Improve the efficacy of retinoid therapy and reduce its side effects”**

**7 DEHYDROCHOLESTEROL:** also known as provitamin D3 is a biological precursor of Vitamin D3 (cholecalciferol) and it is transformed after exposition to UV light. Cholecalciferol is a steroid with structural affinities to testosterone, cholesterol and cortisol. It is the inactive form of Vitamin D3. It is believed that the conversion of cholecalciferol into calcitriol the biologically active form of Vitamin D3 occurs at the keratocytes. The metabolites of Vitamin D regulates important functions of the skin: in the cellular differentiation, in the activation of antimicrobial peptides, in the development of the envelope and the barrier function, in the protection against UV radiation and in the action on melanocytes and on the melanogenesis. 

**NICOTINAMIDE:** also known as Niacinamide or Vitamin PP is the hydrosoluble form of nicotinic acid. It is hydrosoluble and stable in the presence of light and oxygen, easily formulated and well tolerated on the skin even at high doses. Nicotinamide at the epidermic level increases the synthesis of proteins and keratin, stimulates the synthesis of ceramides, accelerates the differentiation of keratocytes with an improvement of the dermo-epidermal barrier function. It increases the hydration and has an inhibitory effect on photocarcinogenesis. Topical nicotinamide at 4% is as effective as clindamycin 1% in the treatment of pus bearing papules in acne without inducing antibiotic resistance. It has a notable sebo-regulatory action with a significant reductive effect on the sebum secretion (SER). When combined with topical retinoids it reduces the side effects of the latter due to its anti-inflammatory effects and due to protective effects of the epidermal barrier function. Nicotinamide 4% is an ancillary complementary therapy in acne: its usage is safe and thanks to its anti-inflammatory effects it may be considered for the treatment of mild to moderate acne.

**RETINOL:** the term Vitamin A refers to retinol and its natural metabolites also called retinoids of which there exists over 1000 varieties (both natural and synthetic). Vitamin A is used in 3 different forms in dermatology: the alcoholic form (retinol), the aldehyde form (retinaldehyde) and the acid form (retinoic acid). While retinoic acid is the biologically most potent in modulating the functions of the skin, retinol is 100 times more potent than the esters and 10 times less potent than retinoic acid but with a better tolerability on the human skin. At the epidermal level retinol regulates the growth of the epithelial cells and the differentiation of the epidermis with an increase of the epidermic hyperplasia and a reduction of the corneocyte adhesion. At the derma it stimulates the synthesis of procollagen and increases the mature collagen band at the superficial derma (that is a cancellation of wrinkles) and it inhibits the proliferation of sebocytes in a dose dependant manner reducing thus the synthesis of lipids and the differentiation of sebocytes.

Airless bottle of 40 ml

**Liposkin® cream**

# Liposkin<sup>®</sup> foam

*Zinc gluconate/Nicotinamide*  
**Antimicrobial and anti-inflammatory activity**

*New tensioactive system*  
**Optimal compliance**

**Indications:**

- Patients in pharmacological treatment for acne



*Delicate detergent that ensures optimal patient adherence in acneic subjects*

*Ecological foam indicated for the deterision in patients being treated for acne. The product respects the hydrolipidic film without irritating the skin and the foam formulation offers a sensation of softness and well-being. The niacinamide and the zinc gluconate contributes to the control of the superficial microbial flora and respects the function of the cutaneous barrier. This package size allows for more than 200 facial treatments. Non irritant and does not contain parabens. Nickel tested\*.*

**Mode of use:** wet the face with lukewarm water and apply a walnut sized dose of foam on the hands, spread uniformly on the affected cutaneous areas (face or back) and leave to act for a few minutes before rinsing. A constant deterision contributes to maintaining the skin in physiological conditions.

**Frequency of use recommended:** twice a day preferably in the morning and evening and prior to eventual topical treatments.

**“Restores functionality of the cutaneous barrier”**

**ZINC GLUCONATE:** antiinflammatory action, sebum fluidifying and protective against Pacnes resistant to erythromycin.

**NICOTINAMIDE:** acts synergically with the zinc and potentiates its antiinflammatory propeties. Allows for the restoration of the cutaneous barrier.

**NEW TENSIOACTIVE SYSTEM:** a selection of tensioactives chosen for their optimal foaming properties and maximal compatibility with the skin.

**\*Nickel less than 0.00001%  
Tested with AAS/GF**

Bottle of 150 ml

**Liposkin® foam**

# MYO-AC

*Myo-Inositol*

**Improvement of insulin resistance**

**Mitigation of peripheral hyperandrogenism**

(GLUTEN  
FREE\*)

(NO ADDED  
SUGAR)

*Nicotinamide*

**Anti-inflammatory**

**Restores the skin barrier**

*Folic acid*

**Regulates homocysteine levels**

**Indications:**

Treatment of mild/moderate acne  
in all its clinical forms:

- Juvenile acne, even in male subjects
- Acne caused by PCOS and metabolic syndrome
- LOA

To improve the epidermal/keratinocyte dysfunction  
maintaining skin homeostasis



*The food supplement that fights acne at the root*

*The reduction of the condition of insulin resistance supported by the product improves the appearance of the skin and is effective particularly in cases of acne caused by PCOS.*

*It actually improves oocyte quality, the condition of chronic anovulation, the degree of fertility and reduces the risk of possible complications in pregnancy.*

**Recommended daily dose:** you should take one sachet per day. Do not exceed the recommended daily dose.

**Directions for use:** pour the contents of one sachet in a glass (at least 150 ml), stir well and drink immediately after preparation. Any insoluble residues are due to the high concentration of active ingredients present and do not constitute a defect of the product.

**MYO-INOSITOL:** in the literature, its use by oral administration is effective in the treatment of hyperandrogenism and insulin resistance. At a topical level, it acts, most likely, as an inhibitor of specific cytochromes, counteracting topical hyperandrogenism and normalizing it.

**NICOTINAMIDE:** inhibits the production of pro-inflammatory cytokines and chemotaxis of leukocytes, by regulating the expression of IL-8 gene (whose activation is stimulated by *P. acnes*), it acts as a regulator of the synthesis of epidermal sphingolipids and ceramides; moreover, literature shows that it also acts as a regulator of the markers of cellular differentiation and dermal proliferation, improving the barrier function of the stratum corneum.

**FOLIC ACID:** helps maintain normal homocysteine levels. It is a salt of glucosamine 5-methyltetrahydrofolate (5-MTHF), which is the active form of folic acid.

The salt formed with glucosamine makes it dispersible in water and bioavailable.

The administration of the active form ensures using the entire quantity administered, without danger of accumulation of metabolites formed during the physiological process of metabolism of the folic acid.



20 sachets of 4,7 g

# Deltacrin<sup>®</sup> wnt Caps

*Soy-Life<sup>®</sup>*

**Activation of the WNT pathway**

*Carthamus*

**Inhibition of 5 Alpha Reductase**

*Melatonin*

**Regulation of the hair cycle**

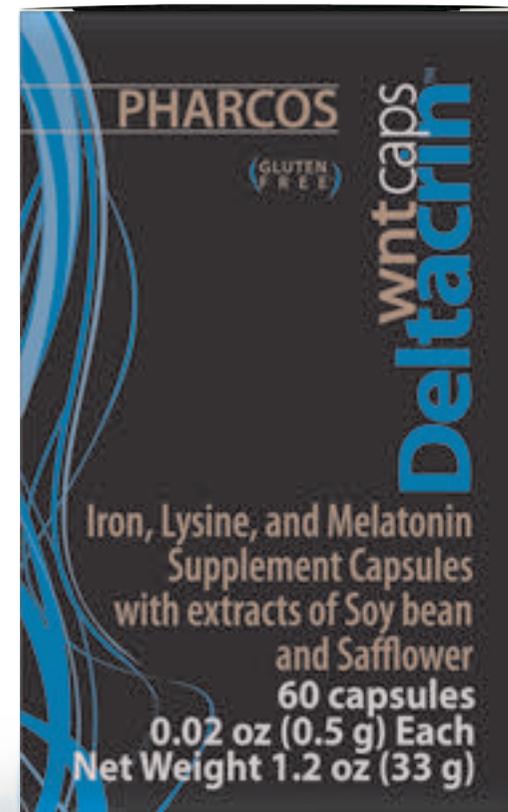
*Iron/lysine*

**Restoration of serum ferritin levels**

**Indications:**

Recommended for subjects with female and male androgenetic alopecia

(GLUTEN  
FREE)



*Dual action on the Hair Cycle*

## CLINICAL DATA

Biomolecular study data obtained from on the biopsies of hair follicles indicate that the daily administration of Deltacrin® WNT Caps in patients with AGA is able to favorably modulate numerous distinct biological pathways involved in anagen and catagen. The stimulation of the WNT pathway, shown to be reduced in patients with alopecia, makes the product particularly useful for the treatment of this condition. **"Study on the role of the genic expression induced by the subministration of the new Deltacrin® caps in hair follicles of patients affected by androgenetic alopecia (AGA)" - (Emanuele et al. - Submitted for publication).**

The clinical usefulness and the predictive factors for efficacy was studied in 224 patients treated 6 months. The results indicated that Deltacrin WNT Caps may be particularly recommended for the treatment of female patients with mild to moderate alopecia with a negative family history of alopecia. **"Deltacrin® caps: demographic and clinic predictors of efficacy" - (Emanuele et al.).**



*Deltacrin® WNT Capsules is a food supplement that contains Iron and Lysine with Melatonin together with extracts of Soybean and extracts of Carthamus.*

**Recommended daily dose:** one tablet a day preferably in the evening before sleep.

**Recommended frequency:** long term therapy.

## "Increased WNT expression and clinical efficacy documented in a large study on 224 patients"

**Soylife® 80 mg/ caps :** extracted from soy beans this is the most studied source of isoflavones with a larger percentage of Daidzein compared to other isoflavones. Daidzein is a precursor of equol a potent isoflavone that has been shown to have a key role in the beneficial effects of isoflavones from soybeans. SOYLIFE® is capable of activating the WNT/beta catenin pathway and promote anagen and inhibit catagen in a androgen-independent manner.

**Carthamus (Carthamus tinctorius L) 50mg/ caps:** from the family of Asteraceae this is a plant that is native to Iran, northwest of India and certain parts of Africa. The medicinal parts include the flowers, seeds and the oil extracted from its embryo. It has anti neoplastic properties and it is known to have antihelminthic, antiseptic, diuretic and anti pyretic properties (Von Bruchhausen 2007). Carthamus is a potent inhibitor of 5α reductase and studies conducted in both animals and humans indicate that Carthamus may act as a natural finasteride.

**Melatonin 1 mg/caps:** the hair follicles synthesize melatonin and has specific membrane receptors (MT1, MT2) whose expression varies according to the hair cycle increasing during the anagen phase. A pilot study confirmed that melatonin increased the hair count in the anagen phase in women with androgenetic or diffuse alopecia. It may also protect the hair in stress induced by high levels of noradrenaline and corticosteroids.

**Iron 7 mg/ caps:** component of the prosthetic heme group of hemoglobin; it is necessary for the normal supply of oxygen to the hair scalp and for the biosynthesis of keratins. Despite the fact that its role is not fully understood it is evident that there is a relationship between hair loss and iron deficiency even in the absence of anemia.

**Lysine 168mg/cps:** an essential amino acid that influences the absorption of iron and zinc. In particular the addition of lysine to a supplementation of iron significantly improves the blood levels of ferritin. In recent it has been affirmed that the increased uptake of Lysine may also significantly improve the effects of agents like finasteride or minoxidil.



60 capsules containing  
550 mg each

# Deltacrin<sup>®</sup> wnt Spray

*Methyl Vanillate*

**Active ingredient of natural origin that promotes topical activation of WNT, a pathway of androgen-independent growth of hair**

*Combination of Trehalose/Manganese*

**Association of a disaccharide and a mineral that prevents denaturation of hair keratins**

**Indications:**

- Male and female androgenetic alopecia
- Areated alopecia



*The 1<sup>st</sup> specific activator of WNT pathway*

## CLINICAL DATA

In a six month study in 20 women with AGA , DELTACRIN WNT Spray treatment was shown to significantly increase hair count and hair mass index (HMI) measures.



Hair follicle biopsies carried out before and after DELTACRIN WNT Spray treatment indicated significant increases in WNT expression that were significantly correlated with the significant increases in hair density, hair diameter and hair mass index measures. ***“Topical application of the Wnt/ $\beta$ -catenin activator methyl vanillate increases hair count and hair mass index in women with androgenetic alopecia”*** - Antonella Tosti, Martin N. Zaiac, Agnese Canazza, Fabian Sanchis-Gomar, Helios Pareja-Galeano, Rafael Alis, Alejandro Lucia & Enzo Emanuele (submitted for publication)

*Deltacrin WNT Spray is a formulation without alcohol that acts on the principal causes of hair loss and on the improvement of the state of the hair shaft: It may be used in association with other trichological treatments.*

**Mode of use:** Spray directly on hair without rinsing.

**Dosage per application:**  
4-8 puffs depending on the area to be treated.

**Frequency of treatment:** every other day.

**“Demonstrated increase in the number of follicles  
the diameter and in the density of hair in 20 patients with AGA”**

**METHYL VANILLATE:** it is found in the peduncle of raisins (Hovenia Dulcis Thumb) and it increases the WNT expression in a dose dependant manner.

**TREHALOSE+MANGANESE:** association of a disaccharide and a mineral that prevents denaturation of hair keratins.



Spray of 60 ml

# Deltacrin<sup>®</sup> wnt Shampoo

*Alpha-Glycosil Hesperidin*  
**WNT Activation**

*Trehalose/Manganese*  
**Protection and Maintenance  
of the hair keratinic folding**

*Alpha-Glycosil Hesperidin*  
*Menthol*  
**Increased blood flow at the scalp**

**Indications:**

- Androgenetic alopecia
- Mixed forms of alopecia with telogen effluvium  
or seborrheic dermatitis
- Alopecia Areata



*Complementary treatment for WNT activation*

## CLINICAL DATA

Test performed on a shampoo formulation based on Esperidina have shown that the product, well tolerated from a cosmetic prospective, can represent a valid support in the treatment of tricological pathologies.



**“Evaluation of the efficacy of a shampoo based on Esperidina” - G. Fabbrocini, C. Capasso, M. Cantelli - Università degli Studi di Napoli, Federico II - Dermakos - Settembre 2017**

*In virtue of its innovative formulation the use of Deltacrin® WNT Shampoo may counteract hair loss and improve and the appearance of the hair shaft.*

**Mode of use:** Apply Deltacrin® WNT Shampoo evenly to damp hair and massage into the scalp especially in the fronto-temporal region for at least 3 minutes prior to rinsing. If necessary repeat the application. For a more complete treatment associate with use of Deltacrin® WNT Spray.

**Dosage per application:** depending on the amount and length of hair.

**Frequency of application:** 2-4 times a week; may also be used every day if necessary.

**“Balanced combination of anionic, amphoteric and non ionic tensides”**

**ALFA-GLUCOSIL ESPERIDINA:** Compound made from glucose and hesperidin a flavonoid present in citrus fruits .Improves the microcirculationat the hair scalp and activates the WNT pathway in a dose dependant manner.



**TREHALOSE - MANGANESE:** Trehalose is a non-reducing disaccharide preserves the molecular structure of proteins while manganese is a mineral with antioxidant properties ; the two when associated can preserve the correct folding of the keratins of the hair shaft.

**MENTHOL:** has positive effects on the hair scalp microcirculation: it also has antimicrobial effects and mitigates the scalp itch.

Bottle of 150 ml

**Deltacrin® wnt shampoo**

# Triconicon®

*L-Cystine / L-Methionine / Zinc / Iron / Copper*  
**Keratinization of the skin adnexa**

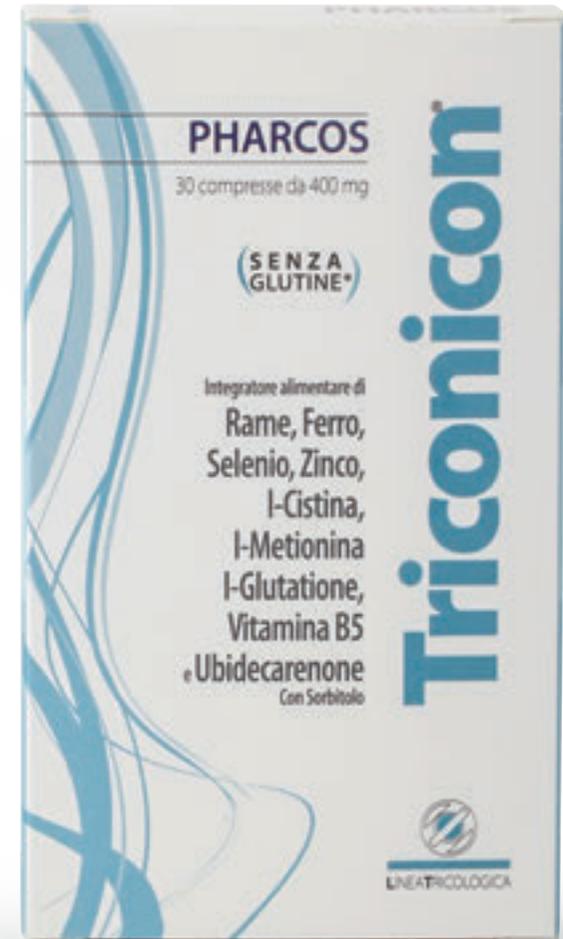
*Coenzyme Q10 / Glutathione / Selenium*  
**Neutralization of the matrix  
 inflammatory phenomena**

**Indications:**

- Structural fragility and dystrophy of the hair and nails
- Defluvium capillorum, in particular, if determined by nutritional deficiencies, breast feeding, endocrinal disturbances
- and dysmetabolisms, biological aging and photoaging
- Useful also in pathologies associated with celiachia, psoriasis, herpetic dermatitis, dry skin, urticaria and alopecia.

(GLUTEN  
F R E E\*)

"Double film"



*Regulation of the cellular metabolism of the hair and the nail*

## CLINICAL DATA



In subjects with onychorrhexis with more than two lamella damaged, an association of Triconicon® given twice daily and Onicoker applied once a day for three months, over 90% of the patients were clinically cured and the remainder showed clinical improvements.

**“E.M. Difonzo et al., 2006- data on file”**

In a study of the composition of available food supplements indicated that TRICONICON® was the ideal food supplement for the treatment for telogen effluvium for favourably influencing the functional activities of the hair follicle.

**“Telogen effluvium and food supplements” – (L. Amato, S. Giorgini, M.C. Mellini). G.Ital. Dermatol.Venereol. 1999 n.3**

**Food supplement containing aminoacids with sulphur (L-Cystine, L-Methylthionine, L-Glutathione) and oligoelements (Iron, Copper, Selenium and Zinc) with Vitamin B5 and Ubidecarenone.**

**Recommended daily dose:** 2 capsules to be taken with meals preferable at breakfast and lunch.

**Recommended frequency:** treatment cycles of 2-3 months.

**Warnings:** due to the presence of selenium, do not exceed the indicated posology. Excessive usage may cause sorbitol related laxative effects.

## “Gluten free - with gluten levels less than 20 parts per million”

**UBIQUINONE:** (Ubidecarenone or Coenzyme Q10) is present in all living cells where it has a fundamental role in regulating the cellular respiratory process at the mitochondrial level. It is an liposolubile antioxidant, structurally similar to Vit.E though it is not considered a vitamin as the body can synthesize it and it is capable of better defending the membrane lipoproteins from the lipidic peroxidases. On the hair matrix at the cellular level it works by contrasting the actions of the free radicals that alter the differentiating process and the keratinization.

**L-GLUTATHIONE:** a sulphur containing aminoacid that is a naturally present antioxidant in the organism, has an extremely effective action against the free radicals and the acceleration of the aging process both at the extracellular level where it is present as a reduced glutathione and at the intracellular level through the enzyme glutathione peroxidase where the glutathione is combined with selenium. The glutathione is a tripeptide made up of aminoacids, cysteine, glutamic acid and glycine present in the nail and hair matrix.

**L- METHIONINE:** a sulphur containing aminoacid that following ingestion is almost entirely converted to cystine that is then assimilated into the piliferous structure which is in consequence reinforced.

**L- CYSTINE:** is the primary donor of sulphur to the body. It is obtained by the oxidation of cysteine and it is a fundamental constituent of the tissue adjoining structures of the skin that are rich in keratin.

**SELENIUM:** an oligoelement essential for the functioning of the antioxidant enzyme glutathione peroxidase present in the cytoplasm.

**ZINC:** micromineral essential for the activity of superoxide dismutase, a protective antioxidant enzyme that is involved in the elimination of free radicals. It is present in the chemical composition of nails and hair and its deficiency may cause fragility of these.

**IRON:** micromineral essential for catalase one of the main enzymatic mechanisms of defence against free radicals. It is present in the hair and it is necessary for the life of the keratocytes as it is present in the heme part of hemoglobin involved in the transport of oxygen to the cells.

**COPPER:** present in the enzyme superoxide dismutase involved in the cellular protection against free radicals. Copper also has an important role in the keratinization catalysing the oxidation of cysteine into cystine through the formation of di-sulphide bridges.

**PANTOTHENIC ACID:** Vit B5 is the precursor of coenzyme A (Vit B5+ATP+Cysteine) present in all cells involved in the production of energy. Its deficiency can lead to alterations the adjoining tissues of the skin in particular of the hair.



30 tablets of 400 mg each

# ATOP *crema*

## *Palmitoylethanolamide (PEA)*

Anti-itching action by inhibition of mast cell degranulation and inflammation

## *7-dehydrocholesterol*

Promotion of keratinocyte differentiation by normalization of the lipid content in keratinocytes

## *High molecular weight hyaluronic acid*

Reduction of transepidermal water loss and promotion of healing process

### **Indications:**

- Skin eczema
- Skin prone to atopic dermatitis and hyper-reactive
- Erythematous, pruritic skin, with impaired protective barrier
- Contact dermatitis
- Rush and folliculitis, even in cancer patients

DERMATOLOGICALLY TESTED  
ON SENSITIVE SKIN



*Topical loading dose therapy for an immediate effect*

"Recommended as a topical loading dose treatment for eczema, so as to ensure an immediate relief of symptoms, mainly due to the presence of PEA."

*cream is the ideal protective and soothing treatment for all skin types, suitable even for the most sensitive individuals.*

*It minimizes skin irritations caused by external agents and reinforces the physiological action of the skin barrier.*

**Nickel tested. Fragrance free.**

**HOW TO USE:** Apply to face and/or body. Apply and gently massage the affected areas until completely absorbed.

**RECOMMENDED FREQUENCY OF USE:** Several times a day, as needed.

"Innovative formula based on three active ingredients "

**PALMITOYLETHANOLAMIDE (PEA):** PEA inhibits mast cell degranulation, one of the key mechanisms in the pathogenesis of pruritus, and has strong anti-inflammatory activity.

**7-DEHYDROCHOLESTEROL:** promotes keratinocyte differentiation by normalizing the lipid content in of kertinocytes.

**HIGH MOLECULAR WEIGHT HYALURONIC ACID:** reduces the transepidermal water loss.

**LOW MOLECULAR WEIGHT HYALURONIC ACID:** promotes the healing process.



Bottle of 400 ml e

# ATOP<sup>pro</sup>

*Bifidobacterium lactis UABLA-12 • Lactobacillus acidophilus DDS-1*

Restoration of the physiological gut-skin axis  
Reduction of interleukin-31

*Vitamin D3 (cholecalciferol)*

Promotion of keratinocyte differentiation  
(normalization of the lipid content)  
and reduction of transepidermal water loss

*Histidine*

Increased expression of filaggrin

(GLUTEN  
FREE\*)

**Indications:**

- Skin eczema
- Skin prone to atopic dermatitis and hyper-reactive
- Erythematous, pruritic skin, with impaired protective barrier
- Contact dermatitis
- Rush and folliculitis, even in cancer patients



*Systemic integration for maintenance*

**Sample:**  
10 patients with eczema at the back of the hands and 10 healthy controls

**Treatment:**  
Atop Proper 60 days, one vial a day

Scoring scale POEM to assess the severity of the eczema

Biopsies of the skin lesion before and after the treatment

**Clinical Endpoint**

Severity of eczema assessed by POEM - Patient Oriented Eczema Measure (POEM) scoring scale: scores from 0 to 28, with higher scores indicating a greater severity of eczema

**Results:**  
The average scores of the POEM scale decreased from 7.2 at baseline to 5.1 after 60 days.

**Molecular Endpoint**

Biopsies of the skin lesion before and after the treatment with:

- Filaggrin** – protein rich in histidine incorporated in the lipidic layer of keratinocytes, responsible for the barrier function of the skin.
- Aquaporin-3** – water channel expressed in keratinocytes, mediator of transepidermal water loss
- Interleukin-31** – proinflammatory molecule and mediator of pruritus

Marker	Controls (n = 10)	Patients baseline values (n = 10)	Patients values after 60 days of treatment with Atop Pro (n = 10)
Filaggrin	644 ± 263	289 ± 137	401 ± 189*
Aquaporin-3	89 ± 12	168 ± 38	124 ± 56*
Interleukin-31	10 ± 4	46 ± 20	35 ± 22**

\*P < 0.001, \*\*P < 0.05 compared to baseline values.  
The gene expression values represent arbitrary units of mRNA measured by qRT-PCR

**Results:**  
Increased expression of filaggrin  
Reduction of the expression of aquaporin-3  
Reduced expression of interleukin-31

**CLINICAL DATA**

“Evaluate the clinical and molecular effects of supplementation with Atop Pro in adult patients with eczema”

Enzo Emanuele

ATOP pro is a Vitamin D3-based dietary supplement with Histidine, Spirulina, Bidobacterium lactis UABla-12™ and Lactobacillus acidophilus DDS®-1, useful in case of increased requirements of such nutrients.

**Recommended daily dose:** take one vial a day, preferably between meals. Do not exceed the recommended daily dose.

**Recommended frequency of use:** Several times a day, as needed.

“Super probiotic strains developed by the US company UASLabs”

**PROBIOTICS:** • Bifidobacterium lactis UABLA-12  
• Lactobacillus acidophilus DDS-1

Super probiotic strains developed by the US company UASLabs with:

- High tolerance to gastric pH
- Ability to withstand the bile salts
- High ability to adhere to intestinal cells

Efficacy of Bifidobacterium lactis UABLA-12 and Lactobacillus acidophilus DDS-1 clinically proved in the treatment of atopic dermatitis by two independent studies:

- Gerasimov SV, et al. Am J Clin Dermatol 2010;11:351–61.
- Machura E, et al. Pediatr Allergy Immunol 2008;19:37-45.

**VITAMIN D3 (COLECALCIFEROL):** Promotion of keratinocyte differentiation (normalization of the lipid content) and reduction of transepidermal water loss.

**HISTIDINE:** Amino acid abundantly present in filaggrin - protein incorporated in the lipidic layer of keratinocytes, responsible for the barrier function of the skin.



21 vials of 10 ml with Rewcap®

# Cromovit<sup>®</sup> capsules

*Geniposide / Nicotinamide*

**Contrasts the melanocyte immunological stress**

*Phenylalanine / L- Tyrosine / Copper*

**Stimulation of the melanin biosynthesis**

**Indications:**

- Vitiligo
- Pityriasis Alba
- Pityriasis Versicolor
- Clinical outcomes of atopic dermatitis, psoriasis and other skin hypochromic affections.
- Usable also in combination with PUVA, UVB-NB and corticosteroid therapy.

(GLUTEN  
FREE\*)



*Oral treatment for skin achromia and skin hypochromia*

## CLINICAL DATA

A double blind clinical study is performed in patients treated with Cromovit capsules and/or UVB 311 nm phototherapy.

The study duration has been 6 months and the clinical evaluation will include measures of the vitiligo activity index and the melanin content levels in the reference areas with a digital apparatus, Antera 3D.

The results show that Cromovit® capsules allows to restart the repigmentation of areas affected by Vitiligo in stationary phase and has a synergic action with the UVB 311 nm phototherapy.

*“Clinical study on the efficacy of a new food supplement containing Jasminoides in 60 patients affected by generalized Vitiligo”. Claudio Comacchi*



*Cromovit® capsules is a food supplement containing Copper, Nicotinamide, L-phenylalanine, L-Tyrosine and a dry extract of Gardenia Jasminoides useful for filling nutritional deficiencies or increased needs of these nutrients.*

**Daily recommended dose:** One capsules a day. It is recommended not to increase the daily dosage.

**Recommended frequency of usage:** trimestral cycles (summer/ winter).

“May be utilized in association with phototherapy and corticosteroids”

**COPPER 1mg:** indispensable for catalyzing the conversion of tyrosine to DOPA during the process of melanogenesis. Participates in many cellular metabolic reactions, in particular in those involved in anti oxidant activities (is part of super oxide dismutase).

**PHENYL ALANINE 150 mg:** an essential aminoacid used in the UVA therapy for vitiligo. The exact mechanism of action is not known but it is hypothesized that it causes alterations at the Langerhans cells of the epidermis and inhibits the synthesis of antibodies. Participates in the melanogenetic process synthesizing tyrosine.

**L-TYROSINE 60 mg:** precursor aminoacid in the synthesis of melanin. The first pass reaction converts the aminoacid into 2,3 dihydroxyphenyl alanine; successively the enzyme tyrosinase produces dopachinone. In the first branch of the pathway dopachinone is converted into eumelanin while the interaction with cysteine forms feomelanin.

**NICOTINAMIDE 54 mg:** the amide of nicotinic acid that is a component of Vitamin PP. It plays an important role in the oxidoreductive processes and it has photoprotective activities. Nicotinamide deficiencies lead to a complex picture of which high photosensitivity is an important part. Studies have documented its favourable effects in certain forms of photodermatosis.

**GENIPOSIDE 24.5 mg:** stable glycosidic iridoid of monoterpene origin present in Gardenia Jasminoides, “summer snow”, an evergreen bush that produces large white intensively profumed flower; The biologically active extract of the plant in our laboratory is titled at 98%. Geniposide in vitro has demonstrated a capacity of increasing the resistance of the melanocytes to cellular death induced by proapoptotic stimuli.



60 caps of 450 mg each

# Cromovit<sup>®</sup> cream

*Carnosine / D-boldine / Polygonum Cuspidatum*  
**Sirtuin activation vs precocious aging**

*Phenylalananine / Liposomal folic acid*  
**Repigmentation stimulus**

*$\beta$ -Sitosterol*  
**Reduction of the photoinduced erythema**

**Indications:**

- Localized Vitiligo
- Generalised Vitiligo
- Adverse effects from phototherapy
- Post-inflammatory hypochromia
- Outcomes of alba and versicolor pityriasis
- guttate idiopathic hypomelanosis
- premature aging

*"Soon available  
 new enhanced formulation"*



*Topical adjunctive treatment for vitiligoid subjects*

## CLINICAL DATA

The results of a controlled study **“Cromovit® cream vs placebo in vitiligo patients treated with excimer laser” (G. Leone et al)** indicated that the product improves the results of phototherapy treatment with excimer laser in vitiligo patients. In particular the use of Cromovit® cream for a period of at least 2 months, increased the degree of pigment compared to the cream containing placebo. In general these study results indicate that Cromovit® cream may reduce the duration of the phototherapy treatment and also reduce the possible side effects of the UV radiation on the skin. Furthermore, as the results indicate that the adjuvant effects of Cromovit® cream is directly proportional to the duration of the treatment suggesting that to achieve maximal repigmentation effects a pretreatment of at least 15 days of therapy of Cromovit® cream prior to phototherapy may be appropriate. The Cromovit® therapy should continue for the duration of the phototherapy treatment. The study also indicated that the Cromovit® cream therapy had a favorable effect on the intensity of the laser induced erythema.



*Cromovit® cream is a product containing a pool of substances (folic acid in liposomes, phenylalanine, Beta-sitosterol, Carnosine, D-boldine and Polygonum Cuspidatum) indicated to rebalance some processes involved in the depigmentation of the skin. The high molecular weight hyaluronic acid added as vehicle and its cytoactivation properties on the skin improves the efficacy of the product. The product is compatible with helium and with Phototherapy.*

**Mode of use:** apply to the afflicted areas and massage until absorbed.

**Dosage single application:** 2 cm of cream (equal to approx 0.5 ml) will cover a surface of approx 5 cm<sup>2</sup> of skin.

**Application frequency:** 2-3 times a day for a period of 2 to 4 months.

## “Documented beneficial repigmentation effects in patients undergoing laser excimer therapy”

**CARNOSINE, D-BOLDINE, POLYGONUM CUSPIDATUM:** potentiates the sirtuin type 1 and type 2. The sirtuins are proteins codified by the genes SIRT, in mammals there are seven types: SIRT-1, SIRT-6 and SIRT-7 are localized in the nucleus, SIRT-2 in the cytoplasm, while the others are located in the mitochondria. SIRT 1 is the better known. It protects from metabolic senescence (cellular death) as it activates the protective system against oxidative stress and it inhibits apoptosis. SIRT-1 in fact activates SOD (superoxide dismutase) and the Catalase. Resveratrol is a molecule that acts on SIRT-1. SIRT-2 is a regulator of the mitotic cycle: the cells with a higher than normal expression of SIRT-2 divide at a lower rate than others. This pool contains three actives: carnosine HCL that protects the cutaneous cells from glycation and it inverts the cellular damage due to aging; d-boldine, an anti-inflammatory and anti-oxidant alkaloid present in Chilean boldo plant; Mexican bamboo (Polygonum cuspidatum) a rich source of resveratrol that contrasts the signs of aging in as it is an activator of SIRT-1.

**FOLIC ACID:** the liposomal formulation and the high concentration utilized is effective in recoloring the achromia skin spots. Its in loco activity is explicated via three possible mechanisms:  
1) the metabolism of pteridine, which together with parabenzoic acid that constitutes the molecule of folic acid, whose deficit may critically lower the concentration of tyrosine and lead to a block of the pigmentation;  
2) interaction with Vitamin B12 in the hypothesis that the depigmentation in vitiligo is a consequence of a methionine –Vitamin B12 dependent increased synthesis of homocysteine;  
3) the stimulus of fibroblast following UV irradiation with a consequent repair of the DNA which allows for a better reactivity in the site treated.

**PHENYLALANINE:** an essential amino acid that is a precursor of tyrosine. It participates in the synthesis of melanin and it is used to increase the repigmentation induced by photochemotherapy without phototoxic or photo-sensitization effects. Its mechanism of action is most probably due to alterations of the Langerhans cells of the epidermis and to the inhibition of the synthesis of anti-melanocyte antibodies.

**β-SITOSTEROL:** phytosterol of vegetable origin with anti-inflammatory effects similar to corticosteroids. Its effects differ from corticoids as it exerts an influence on the arachidonic acid pathway reducing the proinflammatory leucotrienes. Its use is tied to the key pathogenetic role of autoantibodies and auto-reactive lymphocyte T against melanocyte cells in vitiligo. It has also good hydration properties.

**HYALURONIC ACID:** long considered just a hydrating agent it is now recognized to be an excellent vehicle for cosmetic formulations. At certain molecular weights and certain concentrations it is an excellent delivery system for allowing actives to arrive at the microenvironment of the melanocytes.



Tube of 40 ml

# SPOTLESS®

DERMATOLOGICALLY TESTED

*Butyl-resorcinol*  
*CYS-GSH complex*  
**Inhibition of tyrosinase**

*Hydroxyapatite*  
**Luminosity and homogeneity effects**

**Indications:**

- Epidermal melasma (or cloasma) or mixed forms
- Freckles and solar spots on the face and neck
- Senile spots (age spots)
- Superficial spots on the back of the hands
- Post operative hyperpigmentation (laser treatment or peeling and dermatological pathologies with an inflammatory component).



*New formula for the treatment of hyperpigmentation*

*The new formulation of Spotless® utilizes butyl resorcinol for contrasting melanogenesis and the “luminosity effect” is provided by the glutathione-cysteine complex. These effects are boosted by hydroxyapatite and the presence of solar filters. Spotless® may contribute to photoprotection from the UV rays, one of the principal causes of the occurrence of skin spots. Spotless® is indicated for contrasting the unaesthetic senile spots, freckles, melasma or post inflammatory hyperpigmentation.*

**Mode of use:** apply with a mild massage on the interested areas. In case of an expected prolonged solar exposition it is advisable to use a high protection solar cream.

**Dosage for a single application:** apply approximately 1 coffee bean sized dosage for the frontal region and 2-3 bean sized dose (0.50-0.75 ml) for all the face.

**Recommended frequency of use:** twice daily for at least 8 weeks repeat the application.

## “Solar filter”

**BUTIL-RESORCINOLO:** inhibits the melanin formation via the inhibition of the enzyme tyrosinase. Promotes the luminosity and the uniformity of the skin tone. Reduces localized spots and hyperpigmentation. It has shown to be significantly more effective in inhibiting human tyrosinase compared to cogic acid, arbutin and hydrochinone in vitro in certain millimolar concentrations. Furthermore it has been demonstrated to have a more rapid clearing of the skin compared to other forms of resorcinol.



**CYS-GSH COMPLEX:** Cysteine (CYS) and Glutathione (GSH) are respectively an amino acid and a tripeptide found ubiquitously in the body. The hydroxyapatite functionalized by cysteine and glutathione acts as a physiological vehicle for the transport of this whitening complex to the inside of the skin. Infact, many studies demonstrate that the addition of glutathione to another thiol, cysteine causes an inactivation of the melanocyte tyronase in a dose dependant manner. A statistically significant improvement of the melanin index (ITA°) and a statistically significant decrease of the yellow –blue coloration have also been demonstrated.

**HYDROXYAPATITE:** the version in powder of this raw material offers a wide range of cosmetic applications that go from its use in make-up to the more modern BB creams and CC creams and to its use in skincare in particular in the field of solar filters and in anti aging products. Due to the high refraction index of the product it has an interesting antiage use tied to its skin filler properties of reflecting light and giving a “soft focus” effect capable of optically masking the skin wrinkles from the very first application. The reflecting activity of the UV-B light also determines skin protective effects preserving the integrity of the dermal elastic collagen fibers acting with a mechanism analogous to the effects obtained with titanium dioxide, giving the finished product a texture and pleasantness of application that is significantly improved while maintaining its performance. These results are confirmed also through the usage of hydroxyapatite in other skin care applications where its activity is similar to or better than the same products formulated with titanium dioxide in SPF 15,30 and 50+. In the antiage usuage the product determines a statistical reduction of the depth of the wrinkle as well a tendential reduction of the mean rugosity.

**TINOSORB M-S:** solar filters for UVA and UVB.

Airless bottle of 30 ml

# SPOTLESS<sup>®</sup> pen.

**Glabridin +  
Andrographolide**

Intensive tyrosinase-independent  
depigmenting action mediated  
by the DKK pathway

Improved skin brightness

**Apolactoferrin**

Chelating of hemosiderin pigmentation

**Indications:**

- Melasma / Chloasma
- Solar lentigo
- Freckles / Ephelides
- Post-inflammatory hyperpigmentation
- Hemosiderin staining



*Lightening gel for intensive local treatment*

## CLINICAL DATA

40 female patients, aged between 18 and 65, with melasma present for at least 6 months and with a skin phototype ranging from I to III-IV. The volunteers applied the Spotless Pen (0.1-0.2 ml/day) on the hyperpigmented spots of the face every morning and evening for a period of 6 months. The product trialed has given satisfactory results in terms of a decrease in the intensity and extent of hyperpigmented areas without major adverse effects. This improvement was documented using non-invasive diagnostic techniques (photographs, X-Ryte, Moisture MeterEpiD, confocal microscopy and Wood's lamp). None of the enrolled patients left the trial and only 9.3% of cases reported a mild and transient xerosis of the treated areas. **"Assessment of the efficacy and tolerability of a topical product with a lightening action on skin affected by melasma"**. M. Cantelli, M. Ferrillo and G. Fabbrocini



*A transparent and odourless gel which, thanks to its combination of active ingredients, is able to act effectively on skin spots, counteracting both melanin hyperpigmentation and hemosiderin staining.*

**Directions for use:** Place the rubber nozzle of the tube on the affected area and press lightly until dispensing the quantity of product needed to form a thin layer of gel on the skin which is rapidly absorbed.

**Single application dose:** one drop of gel corresponds to the treatment of an area of skin of about half a centimetre in diameter.

**Recommended frequency of use:** at least once a day, preferably in the evening.

“Applicator designed for small areas”

**GLABRIDIN:** Licorice extract (*Glycyrrhiza* species) with a good ability to lighten the skin thanks to the presence of isoflavonoids. Glabridin has been shown to exert a tyrosinase inhibiting action fifteen times higher than that of Cogenic Acid with a greater depigmenting ability than Arbutin. It also possesses anti-inflammatory properties against post-inflammatory pigmentation. 

**ANDROGRAPHOLIDE:** Andrographolide is a diterpene lactone extracted from the leaves of *andropogon paniculata*. It has depigmenting and antioxidant properties. It inhibits melanogenesis through two mechanisms: the inhibition of endothelin synthesis and the production of nitric oxide (NO), involved in the regulation network stimulated by UV rays, with consequent stimulation of skin pigmentation. Andrographolide's inhibition of the production of nitric oxide allows to block melanogenesis. Taking into account its profile, this active ingredient may have peripheral vascular effects which, combined with those on pigmentation, could make it a good "homogeniser" of the complexion.

**APOLACTOFERRIN:** chelating of hemosiderin pigmentation, due to haematomas resulting from aesthetic medicine, surgery and post sclerotherapy, prevents iron free in tissues and secretions from forming free radicals.

Tube of 10 ml

# Immunactive



*Vitamin D3 / Lactobacillus acidophilus DDS®\*-1*

*Bifidobacterium lactis UABla-12™*

Specific skin immunomodulators

*Uncaria*

Activation of lymphocytes T and B

*Lysine*

Antiviral

*Heather*

Immunomodulatory  
of innate and adaptive immunity

**Indications:**

- Infections and recurrent:  
Warts / papilloma / warts Molluscum contagiosum,  
Vaginal herpes and herpes labialis
- Antibiotic and antifungal therapies
- Bacterial skin infections (impetigo / pyoderma)
- Canker sores and cheilitis



\*DDS® is a trademark of UAS Laboratories LLC  
and used under license by UAS Laboratories LLC

*Oral immunocutical for specific topical modulation*

## CLINICAL DATA

The soft extract of Heather showed these important results:

- Significant activation of Interleukin 6 and TGF-BETA, responsible for the innate immunity
- Modulation of Interleukin 2, responsible for activating lymphocytes (adaptive immunity)
- It stimulated Interleukin 10, responsible for the ANTI-INFLAMMATORY activity in order to ensure proper safety profile:
- It did NOT stimulate Interleukin 17 and Interleukin 4, responsible for acute allergic responses

***“Immunomodulatory activity of soft extract of Heather (Calluna vulgaris Hull) on human peripheral blood mononuclear ex vivo cells”***

***Governa P. - Biagi M.***



***Immunactive® is a Vitamin D3-based dietary supplement that contains L-Lysine, extracts of Uncaria and Erica and 5 billion Bifidobacterium lactis UABla-12™ and Lactobacillus acidophilus DDS®-1, useful to meet the nutritional requirements or in case of increased requirements of such nutrients. Vitamin D3 contributes to the normal functioning of the immune system, while Uncaria promotes the natural defence system of the body.***

**Daily recommended dose:** we recommend taking one bottle a day for 30 days.

We recommend 3 cycles of 30 days, with a 10 day pause in between. It is preferable to take the product in 3 consecutive cycles.

“Peach tea flavour”

**VITAMIN D3:** Vitamin D3 is naturally biosynthesized in the skin and, by acting locally as well, it features a specific skin organotropism.

Vitamin D modulates the synthesis of antimicrobial peptides in the skin such as cathelicidins, it has a key role in driving the memory T cells to the skin and promotes the differentiation of epidermal cells.

**UNCARIA:** *Uncaria tomentosa* (Willd) DC. is a species belonging to the Rubiaceae family, originating from Central and North America South America. Active part: bark. Constituents: indole alkaloids derivatives (0.15-4.60%), mostly pentacyclic (POA) and tetracyclic (TOA) oxindoles.

Literature on *Uncaria* contains a lot of in vitro and clinical studies. The immunomodulatory activity is related to the presence of pentacyclic oxindole alkaloids causing both increased phagocytosis of granulocytes and macrophages and prevention of proliferation of myeloid cell lines.

POA also stimulate endothelial cells to release regulatory factors that increase the proliferation of T and B lymphocytes.

**HEATHER:** *Calluna vulgaris* Hull belongs to the Ericaceae family. It is also called Scotch heather or ling. Active parts: whole plant, flowering tops.

Constituents: polysaccharides, flavonoids derived from kaempferol and quercetin, triterpenes (ursolic acid), hydroquinone derivatives. The extract of *Erica* has excellent antioxidant and anti-free radical properties and features high antimicrobial and antifungal power, especially on Gram + such as *Staphylococcus* and *Streptococcus* spp. and yeasts such as *Candida* spp. Our studies have also shown significant antioxidant and immunomodulatory effects on innate and adaptive immunity, which is evidenced by its ability to stimulate the release of cytokines and chemokines such as IL-6, TGF-β and IL-2.

**LISINA:** Essential amino acid. It has antiviral activity against HSV and HZV viruses. The virus proteins are rich in L-arginine and studies on tissue cultures indicate that it has an inhibitory effect on viral replication when the ratio between lysine and arginine is higher. It is absorbed in the intestinal lumen and partly metabolised by the liver. The antiviral activity of L-lysine is now widely documented in human and veterinary clinical practice.



15 vials of 10 ml  
with Rewcap®

Immunactive

# Immun*active* junior



**Vitamin D3 / Lactobacillus acidophilus DDS®\*-1**

**Bifidobacterium lactis UABla-12™**

Specific skin immunomodulators

**Lysine**

**Antiviral**

**Heather**

Immunomodulatory of innate  
and adaptive immunity

**Honey and Royal Jelly**

Epidermal antioxidant



**Indications:**

- Infections and recurrent:  
Warts / papilloma / warts Molluscum contagiosum,  
Vaginal herpes and herpes labialis
- Antibiotic and antifungal therapies
- Bacterial skin infections (impetigo / pyoderma)
- Canker sores and cheilitis

\* DDS® is a trademark of UAS Laboratories LLC  
and used under license by UAS Laboratories LLC

*Oral immunocellular designed for toddlers*

- *Suitable for children 3-12 years*



“Pleasant taste”

*Immunactive® junior is a Vitamin D3-based dietary supplement that contains soft extract of Heather, Llysine, Royal Jelly and 5 billion Bifidobacterium lactis UABla-12™ and Lactobacillus acidophilus DDS®-1#, useful to meet the nutritional requirements or in case of increased requirements of such nutrients. Vitamin D3 contributes to the normal functioning of the immune system.*

**Daily recommended dose:** we recommend taking one bottle a day for 21 days. We recommend 3 cycles of 21 days, with a 20 day pause in between. It is preferable to take the product in 3 consecutive cycles.

**VITAMIN D3:** Vitamin D3 is naturally biosynthesized in the skin and, by acting locally as well, it features a specific skin organotropism.

Vitamin D modulates the synthesis of antimicrobial peptides in the skin such as cathelicidins, it has a key role in driving the memory T cells to the skin and promotes the differentiation of epidermal cells.

**HEATHER:** Calluna vulgaris Hull belongs to the Ericaceae family. It is also called Scotch heather or ling.

Active parts: whole plant, flowering tops. Constituents: polysaccharides, flavonoids derived from kaempferol and quercetin, triterpenes (ursolic acid), hydroquinone derivatives.

The extract of Heather has excellent antioxidant and anti-free radical properties and features high antimicrobial and antifungal power, especially on Gram + such as Staphylococcus and Streptococcus spp. and yeasts such as Candida spp. .. Our studies have also shown significant antioxidant and immunomodulatory effects on innate and adaptive immunity, which is evidenced by its ability to stimulate the release of cytokines and chemokines such as IL-6, TGF-β and IL-2.

**LYSINE:** Essential amino acid. It has antiviral activity against HSV and HZV viruses. The virus proteins are rich in L-arginine and studies conducted on tissue cultures indicate that it has an inhibitory effect on viral replication when the ratio between lysine and arginine is higher.

It is absorbed in the intestinal lumen and partly metabolised by the liver.

The antiviral activity of L-lysine is now widely documented in human and veterinary clinical practice.



21 vials of 10 ml  
with Rewcap®





# PHARCOS

Innovation &  
Dermatology

---

Via A. Lorenzetti, 3/A – Loc. Sambuca Val di Pesa – 50028 Barberino Tavarnelle (FI) – Italy  
All rights reserved







 **BioDue** s.p.a.



CERTIFICATO DI ISPEZIONE  
CERTIQUALITY N. P1698  
**GMP**  
PRODUZIONE INTEGRATORI ALIMENTARI  
CFR 21 V2 PART 111  
7-10/05/2012

