

Committed to Health

Catalysis, S.L. was born as a private and independent company that dedicates its efforts to research and the development of products in the pharmaceutical, cosmetic, and dietary fields.

OUR MAIN ACTIVITY IS RESEARCH



A team of scientists works at the search of new remedies to relieve the suffering caused by widespread diseases such as psoriasis, diabetes, asthma, osteoporosis, arthritis, genital and oral herpes, immunodepression (AIDS), cancer, tuberculosis, hepatitis, etc.

The aim of our research is to discover treatments without the use of aggressive medicines that, all too often, produce terrible side effects.

Our products are harmless and based on the latest discoveries of the beneficial effects that ANTIOXIDANTS have on FREE RADICALS in our organism as well as on the stimulation of the body's immune system.

Manufactured by pharmaceutical laboratories equipped with the most advanced technologies, our products undergo the most rigorous controls that the European Union imposes by law on all the manufacturers of pharmaceutical, cosmetic, and dietary products that operate within its frontiers.

DISTRIBUTION THROUGHOUT THE WORLD

Europe

Albania, Belarus, Croatia, Cyprus, Czech Republic, Estonia, France, Germany, Hungary, Latvia, Lithuania, Moldavia, Poland, Portugal, Romania, Russia, Serbia, Slovakia, Slovenia, Turkey, United Kingdom, and Ukraine.

America

Argentina, Bolivia, Brazil, Canada, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, USA, and Venezuela.

Africa

Algeria, Botswana, Egypt, Ghana, Ivory Coast, Kenya, Lesotho, Malawi, Nigeria, South Africa, and Tanzania.

Middle East

Bahrain, Jordan, Kuwait, Lebanon, Qatar, Saudi Arabia, and United Arab Emirates (U.A.E.).

· Asia

Armenia, Azerbaijan, Bangladesh, China, Georgia, Indonesia, Japan, Kazakhstan, Kyrgyzstan, Malaysia, South Korea, Taiwan, Thailand, Turkmenistan, Uzbekistan, and Vietnam.



Our secret?

Molecular activation



The biocatalytic process of MOLECULAR ACTIVATION considerably improves the biological activity and the biochemical reactivity of all antioxidant molecules.

This method of MOLECULAR ACTIVATION METHOD is much more effective when applied to a far wider range of hydrosoluble and liposoluble molecules.

We know the answer to this ACTIVATION in numerous antioxidants of all kinds and also the mechanism by which the accumulated electrons are able to reduce the free radicals of oxidant molecules.

In this mechanism we have observed greater synergy between some antioxidants used, that are sometimes capable of considerably increasing their overall antioxidant capacity.

Many factors can influence the ACTIVATION of all antioxidants.

Amongst the most important chemical factors are the molecular structure, the active functional groups, specific antioxidant catalysts, the molecular weight, the pH, double carbon bonds, their solubility coefficient, etc., as well as the antioxidant capacity of each molecule.

The duration and the intensity of MOLECULAR ACTIVATION are amongst the most influential and important physical factors.

Not all antioxidants require the same ACTIVATION time to reach their maximum antioxidant capacity. The most important parameter for the control of better performance is their optimisation. Once their highest antioxidant capacity is at its most favourable peak, ACTIVATION must be suspended because, after that maximum peak, their antioxidant capacity normally starts to diminish gradually or quickly.

When there is a mixture of two or more antioxidants, the optimal ACTIVATION time is previously calculated for each preparation separately, and this fixed parameter is always respected.

Bioassay on the rabbit cornea

Vilas P. et al (1989): Antiviral activity of a D-glucosamine derivate against herpetic ulcers (HSV type 2) in rabbit cornea. Acta ophthalmologica 67:55-60.



Control of HSV-2 virus with non-activated glucosamine 4 days after viral infection



Control of HSV-2 virus with non-activated glucosamine 14 days after viral infection



Treatment of HSV-2 virus with activated glucosamine 4 days after viral infection



Treatment of HSV-2 virus with activated glucosamine 14 days after viral infection



Treatment of HSV-2 virus with acyclovir 4 days after viral infection



Treatment of HSV-2 virus with acyclovir 14 days after viral infection

These results demonstrate that MOLECULAR ACTIVATION is essential and necessary to increase biological activity and obtain this way the greatest effectiveness in the treatment of diseases which directly or indirectly produce free radicals.

highly effective in the treatment of sexually transmitted diseases (HPV and HSV)

The active principle of **GLIZIGEN**[®] is **glycyrrhizinic acid**, which is highly effective for the topical treatment of infections by herpesvirus (HSV) and human papilloma virus (HPV).

Glycyrrhizinic acid has been proposed as an antiviral against different viruses because it acts (in vitro and in vivo) preventing the replication of DNA and RNA viruses (VZV, HIV, influenza A and B, herpes simplex virus HSV 1 and 2, hepatitis B and C, amongst others).(1,2,3,4,5,6,7,8,9,10)

Clinical studies carried out on patients with different types of herpetic infections and human papilloma virus infection demonstrate its efficacy.

HPV

In all treated patients the following was observed:

- High effectiveness in viral negativization in only 10 days, demonstrated by colposcopy and histopathology.
- Excellent tolerance even with maximum doses used.
- No side effects.
- Greater therapeutic adherence.

HSV

In all treated patients the following was observed:

- High accelerated effectiveness in the initial and recurrent phases of infection by genital herpes, with results in 12 days.
- Excellent analgesic and anti-ulcerous effects from the first application.
- Excellent tolerance without irritation or side effects, even in pregnant women.
- Quick, easy, and hygienic application, which allows better adherence to the treatment.

POSOLOGY 3 - 5 applications a day

30 ml and 60 ml spray bottles with applicator 5 ml lip cream tube 250 ml intimate gel pump/bottle

In some countries, **GLIZIGEN®** is marketed under the name of EPIGEN® or HERPIGEN®

Abe N, Ebina T, Ishida N: Interferon induction by glycyrrhizin and glycyrrhetinic acid in mice. Microbiol. Immunol. 26, 535-539, 1982.
Aikawa Y, Yoshiike T: Effect of glycyrrhizin on pain and HLA-DR antigen expression on CD8-positive cells in peripheral blood of herpes zoster patients in comparison with other antiviral agents. Skin Pharmacol. 3/4; 268-271, 1990.

1990. Baba M, Shigeta S: Actividad anti-viral de la glicirricina contra el virus Varicela-Zoster in Vitro. Antiviral Research, 7, 1987. Badam L: In vitro studies of the effect of Glycyrrhizin from Indian Glycyrrhiza glabra Linn. on some RNA and DNA viruses. Indian-J-Pharmacology, 1994. Brochure de Investigadores (Cheminova Internacional). Madrid, España. 1995. Fujisawa K, Watanabe Y, Kimura K: Therapeutic approach to chronic active hepatitis with glycyrrhizin. Asian Med. J. 23, 745-756, 1980. Hirabayashi K: Antiviral activities of glycyrrhizin and its modified compounds against human immunodeficiency virus type 1 (HIV-1) and herpes simplex virus type 1 (HSV-1) in vitro. Chem Pharm Bull (Tokyo) 1991 Dec; 39 (12): 3382.

vírus type 1 (HSV-1) in vitro. Chem Friam Bun (108/9), 13382.

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Pompei R: Antiviral activity of glycyrrhizic acid. Experientia 36/3, 1980. Shigeta S, Yokota T, Iwabuchi T, Baba M, Konno K, Ogata M, De Clercq E: Comparative efficacy of antiherpes drugs against various strains of varicellazoster virus. J. Infect. Dis. 147, 576-584, 1983.

Utsunomiya T, Kobayashi M: Glycyrrhizin (20b-carboxy-11-oxo-30-norolean-12-en-3b-yl-2-0-b-d-glucopyranuronosyl-a-d-glucopyranosiduronic acid) improves the resistance of thermally injured mice to opportunistic infection of herpes simplex virus type 1. Immunology Letters, Volume 44, Number 1, 1 January 1995, pp. 59-66(8).



no more infections by human papilloma virus (HPV)

GLIZIGEN® is an alternative treatment for many patients affected by herpes simplex labialis and genitalis (herpetic vulvovaginitis, herpetic balanoposthitis) and recurrent herpes simplex, herpes zoster, condyloma acuminata, and verrucae vulgaris.

The tolerance of **GLIZIGEN**® is excellent, without irritation or side effects of any kind.

Application is very easy and totally compatible with any systemic medication the patient is taking.

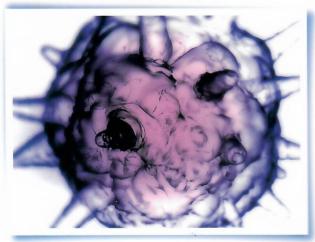
The use of **GLIZIGEN®** is effective in the treatment of external genital warts, particularly if they have not been treated previously.



human papilloma virus

excellent tolerance and complete absence of side effects

GLIZIGEN® is totally compatible with the application of other conventional therapies. It does not produce irritation and thanks to its composition based on natural ingredients, it does not cause side effects.



herpes simplex virus



DIAMEL

helps to prevent and fight kidney failure

With its composition based on powerful antioxidants,

DIAMEL®

has proven highly effective in controlling glucose metabolism and to produce a very noticeable reduction of cellular insulin resistance in only 8 weeks.

The synergy of the amino acids present in the formulation of

DIAMEL®

stimulates proper functioning of the pancreatic beta cells, achieving the complete regulation of glucose and lipid metabolism.⁽¹⁸⁾

The combined action of antioxidants and amino acids of

DIAMEL®

helps relieve the symptoms of diabetes.

- Noticeable reduction of uric acid concentrations.
- The high content of anthocyanosides and tannins from blueberry extract improves microcirculation.
- The presence of arginine, which is the precursor of nitric oxide promotes vasodilation and improves that way erectile dysfunction typical of the diabetic patient.

POSOLOGY 2 capsules three times a day

containers with 30 and 90 capsules of 660 mg



favours vasodilation and improves that way erectile dysfunction ypical of the diabetic patient



It improves sexual function after the second month of treatment, even in cases of severe effects.

regulates glycemic and lipid metabolism

Taken during two months, it reduces statistically mean glycemia (HbA1c level reduced by 16%, p>0.05) and triglycerides by 20% (p>0.05), which means a reduction of insulin resistance.



SPERMOTREND

a specific product for the treatment of male infertility

SPERMOTREND[®] is very effective in the treatment of male infertility causid by **oligoasthenospermia**, **hypospermia**, **teratospermia**, **post-oncological chemotherapy teratospermia**, **etc.**

SPERMOTREND® contains, among other ingredients:

L-arginine, the precursor of nitric oxide, a natural vasodilator that has demonstrated a marked positive effect on erectile dysfunction;

Vitamin E, a powerful antioxidant that improves spermatogenesis.

SPERMOTREND®

after only one month of treatment

- Increases seminal fluid volume.
- Increases sperm concentration and motility.
- Improves chronic prostatitis symptoms.
- Improves sexual desire and satisfaction.
- Stimulates diuresis.

SPERMOTREND® does not have side effects.



revitalizes sperm in a natural way

It improves all the spermiogram parameters and increases sperm motility.



spermiogram

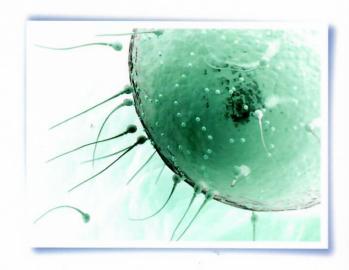
high efficacy in infertility by varicocele

Its vasodilating effect improves venous return and regulates testicular temperature, which favours a correct spermatogenesis that shows itself in the increase of the sperm quantity and quality in the spermiograms.

healthy sperm increases fertility

Oxidative stress plays an important role in male reproduction capacity and is associated with the deterioration of sperm quality.

SPERMOTREND® is a combination of specific antioxidants that help improve sperm quantity, quality, and motility, and, as a consequence of it all, fertility.





Urology Irological use

RENALOF

an effective treatment to eliminate kidney stones

Clinical studies have demonstrated that **RENALOF**®

administered as a monotherapy for 30 days:(19)

- Represents a very efficient treatment of pyelocalicial lithiasis with calculi of up to 5 - 6 mm, permitting the dissolution and elimination of these;
- Has an excellent anti-inflammatory effect. It is soothing and alleviates pain in the urinary tracts irritated by chronic urinary lithiasis. The same properties are noticed in other inflammations of the urinary tract;
- Represents a prophylactic treatment for patients with a predisposition to lithogenesis in general and to oxalic lithogenesis in particular;
- Represents a particularly efficient complementary treatment in patients who benefit from extracorporeal lithotripsy, managing to rapidly and painlessly eliminate the fragments which remain after lithotripsy.

POSOLOGY 1 capsule three times a day

containers with 30 and 90 capsules of 325 mg



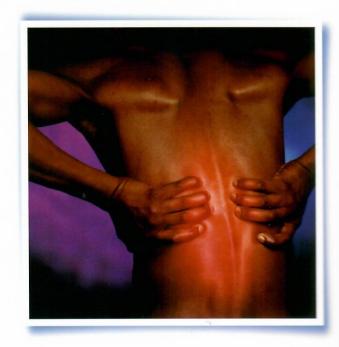
the diuretic and soothing effect of RENALOF® helps the rapid elimination of small and medium-sized ureteral calculi



It provokes the dissolution of calcium oxalate kidney stones and rapidly and painlessly eliminates these, thus avoiding lithotripsy and surgery with the long postoperative recovery period.

highly effective in reducing lumbar pain syndrome

Thanks to its anti-inflammatory effect, it favours the elimination of kidney stones and gravel from the urinary tracts and this way considerably reduces the pain caused by irritation.





complementary therapy for prostate carcinoma

90% efficacy in benign prostatic hyperplasia in only 3 months of treatment

After 6 months of cancer therapy with

ONCOXIN® Oral Solution (15)

- The prostate-specific antigen (PSA) presents very low levels (from 0.02 ng/ml to 7.32 ng/ml) in all the patients.
- The patients tolerate chemotherapy better and with lower rates of leukopenia.
- Lower rates of mucositis and skin erythema due to radiotherapy.
- The immune system is boosted, activating neutrophils that help fight the disease.
- The green tea polyphenols present in the formulation of ONCOXIN® induce apoptosis in the prostate cancer cells.(16)
- No side effects have been detected.
- There is a considerable improvement in the patients' quality of life from only 10 days of treatment on.

In some countries, **ONCOXIN®** Oral Solution is marketed under the name of **OCOXIN®+VIUSID®** Oral Solution.

POSOLOGY 1 capsule three times a day or 25 ml twice a day

containers with 30 and 90 capsules of 300 mg 500 ml bottle with dispenser

15 Costa MA, Rodríguez E, Kobelinsky M: Estudio abierto y prospectivo de la seguridad y eficacia de un suplemento dietario (ONCOXIN), con los marcadores tumorales y la calidad de vida, en pacientes de cáncer de próstata. Solidaridad, Buenos Aires,

Argentina. 2004.
 Kazi A, Smith DM, Zhong Q, Dou QP: Inhibition of Bcl-XL Phosphorylation by Tea Polyphenols or Epigallocatechin-3-Gallate Is Associated with Prostate Cancer Cell Apoptosis. Mol. Pharmacology 62 (4): 765-771, 2002.



effective palliative for the side effects of conventional cancer treatments

The patients cope better with cancer treatment, considerably decreasing the frequency and intensity of side effects.

There is a better tolerance to chemotherapy and radiotherapy progressively during the study, thus avoiding interruption of treatment.



healthy prostate

improves patients' quality of life

Patients' weight increases and there is a better quality of life in only 10 days of treatment, even for terminal patients.



incipient prostate cancer

increases survival rate

In the studies carried out, the Karnofsky index remains stable after 12 months of treatment in 87% of the patients treated with **ONCOXIN®** Oral Solution, compared to 47% of the group who did not.



prostate cancer





powerful immunostimulator for the treatment and control of HPV and HSV and their relapses

VIUSID®

is a nutritional preparation with antiviral properties. It is specially designed for the increase of the immunological defences in all those processes that cause immunodeficiency.

It is for oral administration.

VIUSID®

is the perfect complement to topical therapies used to treat human papilloma virus and herpesvirus due to the **glycyrrhizinic acid** present in its formulation because:

- Alters the latent herpesvirus infection by deregulating the expression of the latencyassociated nuclear antigen (LANA) and increasing the production of viral cyclin, which induces the selective death of the cells infected by the virus as a consequence of the reactivation of p53 and the activation of mitochondrial apoptosis.
- Stimulates interleukin-12 production in macrophages, which facilitates the development of helper T-lymphocytes in the cell-mediated immune response. (13)
- Promotes the inhibition of prostaglandin E2 in damaged tissue.⁽¹⁴⁾
- Induces interferon production, which promotes the activation of macrophages and as a consequence an increase in their phagocytic and destructive properties against microorganisms.

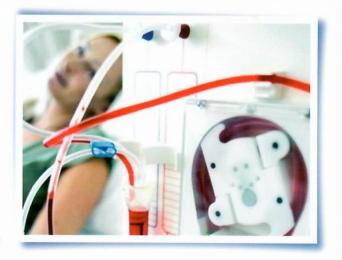
POSOLOGY 1 sachet or 30 ml three times a day

boxes with 21 and 90 sachets of 4 g 100 ml bottle

- 11 Curreli F, Friedman-Kien AE, Flore O: Glycyrrhizic acid alters Kaposi sarcoma-associated herpesvirus latency, triggering 53-mediated apoptosis in transformed B lymphocytes. The Journal of Clinical Investigation 115 (3), 642-652, 2005.
- 12 Cohen JI: Licking latency with licorice. The Journal of Clinical Investigation 115 (3), 591-593, 2005.
- 13 Dai JH et al.: Glycyrrhizin enhances interleukin-12 production in peritoneal macrophages. Immunology 103(2):235-243, 2001.
- 14 Kawakami F, Shimoyama Y, Ohtsuki K: Characterization of complement C3 as a glycyrrhizin (GL)-binding protein and the phosphorylation of C3 alpha by CK-2, which is potently inhibited by GL and glycyrrhetinic acid in vitro. J Biochem (Tokio) 133(2):231-7, 2003.



improves the quality of life of dialysis patients



dialysis session

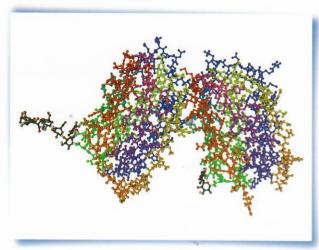
Since dialysis is a very aggressive treatment for the patient, because of the oxidative stress it generates, besides the one produced by the illness itself, both the immune system and the defence mechanisms are affected. **VIUSID**® reduces oxidative stress in these patients and acts as well as an immunomodulator.

administered together with GLIZIGEN® it proves very effective in the treatment of external anogenital warts

Most treated patients' affected skin area was less than 5 cm2 and evolution time of the lesions was between 1 and 4 months.

induces interferon production

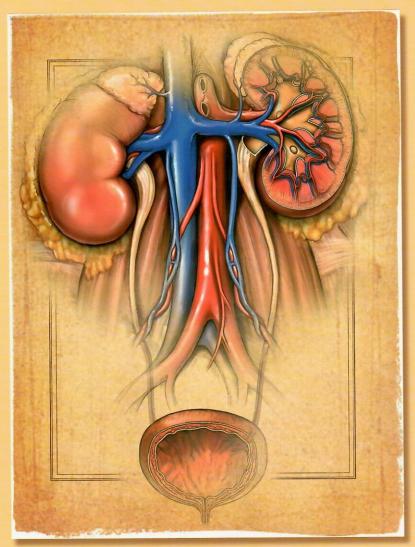
When administered the same dose of MEGOSIN as an interferon inductor instead of **VIUSID**®, the induced titres were 8 times lower intraperitoneally, 4 times lower perorally (after 24 hours of treatment), and 3.2 times lower rectally compared with **VIUSID**®.



human beta-interferon molecule



Urology urological use



Urology

Authorized Distributor





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