

Phyell G2

Unique Derma-integral Action

Introduction

Phyell G-2 represents one of the most advanced scientific achievements to correct skin imperfections through intradermic injections (wrinkles, scars, expression lines). Designed by Dermabiol Institute, Kuhra Vital, Phyell G-2 is available as a net hydrogel with a synergic compound made of an elastin solubilized peptide linked to a hyaluronic acid carrier. These components are linked to fourth-generation copolymers, and the result is a product with tiny acrylate fibers, encapsulated nutrients and great fibrosing ability. Both elastin and hyaluronic acid are included in Phyell G-2 in well-established pH, temperature and ionic force conditions, everything worked together into an opalescent gel. Electronic microscope analysis showed a relationship between the two proteins. Transmission microscope analysis confirmed a very close relationship - hyaluronic acid goes along and around elastin fibers. This is why Phyell G-2 is considered the definite answer for lines, traumatism, open pores and skin imperfections. Say good-bye to wrinkles! They will be gone after your Phyell G-2 intradermal injection.



Composition

How does Phyell G-2 produce such magical effects?

The answer to this question relies on a high-tech formula. High quality scientific and research parameters led us to a formula with the elements constituting the skin: hyaluronic acid, elastin and DNA, along with essential amino acids (iso-aminocaproic and 3-methyl-pentaenoic acids) and new-generation lactic-acid copolymers. Since hyaluronic acid, elastin and DNA are essential components of Phyell G-2, because they are so valuable and provide your skin with a tremendous synergic effect, we have included the following description for the professionals working with Phyell G-2 implants.

Hyaluronic acid (Properties)

Hyaluronic acid is a mucopolysaccharide. It's the essential, structural substance of the skin tissue. Hyaluronic acid will not interfere with the immune system -actually will not be recognized or registered by the body. Thanks to its water-retention ability (in a percentage a thousand times higher than its own weight), this acid will develop an effective action: reconstituting fibers holding our skin tissue. Hyaluronic acid is also an important hydration tool, stimulates peripheral blood circulation and revitalizes cellular cycle. For all these reasons, hyaluronic acid will bring light and softness back into your face.

The Hyaluronic acid included in Phyell G-2 is not intended for "smoothing" your skin, just

the way a lifting would do. However, it's a remarkably effective product for treating wrinkles. Phyll G-2 is also used for improving the lifting effects. Unlike other substances, no problems (granuloma, erythema, hard tissue) have been observed. Hyaluronic acid is a viscous substance that will hold connective cells together, something particularly important to the skin. Today a new name is being used for mucopolysaccharides – glucosaminoglycans. They are composed of one chain of disaccharides of acids, N-acetyl glucosamine and glucuronic acid. This chain is arranged in spirals with an average molecular weight from 2 to 4 millions. This polymer net will act as a medium (just like a gel) for tissue functioning. Hyaluronic acid can be obtained from natural substances or through biochemical techniques, thanks to a process of bacterial fermentation. Among natural substances with high-contents of hyaluronic acids are combs (from cocks), shark fin and umbilical cord.

Hyaluronic acid naturally occurs in our skin, in fact it's an essential component to this organ and plays a vital role by being responsible for bone structure integrity and skin hydration regulation. When implanted at the intermediate level, hyaluronic acid works as a bed expanding as a balloon within the reticular dermis. The hyaluronic acid we included in our formula is a step forward to most interesting methods of working with biotechnically manufactured materials (10% concentration) with higher quality, scope and results standards than any other material so far. We were able to substitute our previous animal origin hyaluronic acid (bovine) with a safer, more effective material. It is important to remember that hyaluronic acid based technology features a remarkable level of safety. Hyaluronic acid is widely used in high-risk surgeries and extremely advanced techniques (ocular and intra-ocular) due to its viscosity and elasticity properties. It is used for creating and maintaining spaces with high vitreous pressures; back segment traumatism, cornea transplants, etc. High viscosity, good tolerance and compatibility make hyaluronic acid a special and particular product for eye surgery (no pharmacological activity observed).

Elastin

Elastin is another component of Phyll G-2, an important protein of the connective tissue that is part of the extracellular matrix and can be observed among all vertebrates (it is not present in invertebrates). Fibroblasts are in charge of producing the elastin of the skin. In Phyll G-2 we changed the animal elastin for a whole, new elastin of marine and vegetal origin, extracted through enzyme fermentation and elastic tissue of fish cartilage (transformed through biotechnological processes). The result is an extraordinary product with improved induction ability on the connective tissue.

Our new formula includes small doses of vegetal ceramides reinforcing collagen fibers, duplicating the action of elastin and activating the power of synthesis in fibroblasts. We found out that marine elastin peptides are present in certain sections of tissues (hydrolysis sections) and they produce important effects, such as chemical attraction of fibroblasts. An elastin peptide-receptor has been observed at the fibroblast level (sub-unity 67 KDa is the acknowledgement site of elastin peptides). These peptides fixed to the corresponding receptor will activate the mechanism of transduction (increased G-phospholipase C and

concentrations of inositol 1, 4, 5-triphosphate and diacylglycerol). Therefore, protein Kinase C is activated and a number of cellular mechanisms are stimulated.

Our elastin is a remarkably versatile product, no matter how different the skins or the pathologies to be treated are. Researchers at Kuhra Vital have proved the analogies between our elastin and the essential dermal and epidermal constituents. The material is similar to the components of the human blood plasma with osmo-dynamic properties simpler and stronger than those of the animal (bovine) elastin, as for the elasticity and strength triggered in situ by the active principles. Elastin is the predominant protein in all elastic structures, such as the wall of major blood vessels and the net of dermic tissues. Elastin fibers exhibit the properties of an elastomer and are completely yellow. Marine elastin fibers are made of cross-linked units, which are small, compact, almost rounded molecules in essential fiber chains held together by means of transversal and rigid links. The structure is similar to that of the animal elastin but differences exist in terms of densimetry and activity. Our new design is a tremendous step forward incorporated into the formula of Phyll G-2.

DNA (deoxyribonucleic acid):

DNA is a co-polymer complex of sugar-protein or nucleoprotein containing the complete genetic code for each cellular enzyme. DNA is a component of the genes and is located at the chromosomes of the cell nucleus. DNA molecule shows a unique, very complicated structure first discovered by Chemists Crick and Watson in 1953. Such structure includes from 3000 to millions of nucleotides (units) arranged in a double helix containing 2-deoxyribose phosphoric acid and nitrogen bases adenine, guanine, cytosine and thymine. The spiral is made of two chains of units, phosphate and deoxyribose (alternating sugar and phosphate molecules). Nitrogen bases are projected into the spiral axis; the chain bases of one chain will be bonded with the chain bases of the other one through hydrogen bridges, forming steps similar to those of a spiral staircase. Adenine will always be bonded with thymine and cytosine will always be bonded with guanine. The complementary nature of the bases makes possible that each chain works as a mold for the other one. That's how two new threads of DNA are made.

Bases sequences are different for each individual. This sequence will be responsible for the genetic code. DNA works with ribonucleic acid (RNA). Auto-replicant DNA synthesis was first achieved at the end of 1967. DNA molecule structure remains to be fully understood. Recent studies on DNA shows a helix that could be particularly directed to the right.

New lactic acid co-polymer

What are lactic acid copolymers?

Lactic acid co-polymers are lactic acid molecules worked into a hydrogel. Lactic acid molecules are found in fruits. The lactic acid molecules used for producing Phyll G-2 are 100% pure (we take them from beet). Lactic acid is being widely produced since 1975 for several fields:

- Food industry
- Surgery (bone implants and saturation material),

- Odontology (flexible bridges, membranes, screws and bolts for osseous surgery).

That's why we chose new generation lactic acid co-polymers for the Phyll G-2 formula. Above all, we wanted to enhance the traditional lactic acid. We needed to work with new-generation lactic-acid copolymers. Further research under international regulations, the European Pharmaceutical Committee, and European standards, lead us to lactic-acid copolymers with eleven ideal features, all of them included in Phyll G-2, a superior implant that easily corrects your skin.

Lactic-acid copolymers in Phyll G-2:

- 1 No allergies observed.
- 2 Stimulate the production of collagen (for restructuring, rejuvenating and regenerating skin tissues). The result is a strong and long-lasting skin correction.
- 3 Biologically broken down and absorbed by the body.
- 4 Easy-to-use: Can be applied on different sections of the skin.
- 5 Safe and reliable.
- 6 No poisoning risks. Use as needed.
- 7 Immediate results.
- 8 Long-lasting results.
- 9 Short-term and long-term effects, widely known in the field.
- 10 No rejection risks.
- 11 Manufactured under high-quality standards. 100% purity guaranteed.

How it works

Phyll G-2 is a hydrogel for intradermal administration. The active compound is a solubilized compound of marine, vegetal elastin, DNA, and hyaluronic acid linked to a carrier made of new-generation lactic acid co-polymers. All of these essential elements from the extra cellular matrix were formulated with extraordinary functionality. Such exceptional formula makes an excellent implant out of Phyll G-2. This product is not just cosmetic filler – it's much more than that.

Phyll G-2 is a cosmetic facial transformer that goes beyond into restructuring your face. Phyll G-2 will work a whole new face by entering your dermis and expanding like a true draft within...

Stretching and smoothing, working into the deeper layers of your skin and bringing a whole new light to your epithelial surface. Say good-bye to flaccidity and recover a young-looking skin. Work on your depressed areas and let DNA and enzymatic components work further into a regeneration action. And finally, see how Phyll G-2 will delight cosmetic professionals and patients with something they will certainly appreciate – a permanent implant.

In some cases, one retouch a year could be necessary. Thanks to the activity of DNA and marine-vegetal elastin, Phyll G-2 is a reliable and permanent regenerative implant, in fact, a soft alternative to plastic surgery. Use it for your chin and cheeks, especially if your nose looks broad (in most of cases caused by low chin and cheekbones).

Research

Let us consider the essential aspects of studies and research performed on Phyll G-2 and its components.

Elastin and Hyaluronic acid

Both are essential components of Phyll G-2 acting in stable conditions (PH, temperature, etc) and "combined" into a viscose component that plays a central role in the formation of membranes. Such metabolic and synergic effect is stronger than that produced by the collagen (which exhibit a particular fragility). These biological and physiological facts have been scientifically observed through electronic microscope, and a relationship between glycoaminoglycan and protein has been determined.

Histological assay

A bio-compatibility assay with rabbits was performed.

Time period: 60 days with follow-ups addressing metabolic reactions and processes.

Results

After ten (10) days

Slight edema on the treated subcutaneous section. Marked lymphocytes reaction was observed.

After thirty (30) days

Some defined vessels are observed. The fibrillation span was not homogeneous, some fibroblasts and fibers near collagen observed.

After forty (40) days

Both inflammation and edema disappeared. Fine organization near fibroblasts observed.

After sixty (60) days

Phyll G-2 completely "digested" by the sub-dermal complex and a high biocompatibility has been proven. No inflammation observed.

Indications

Phyll G-2 is a prosthesis and is indicated for all kind of skins, specially those suffering from wear and flaccidity, hydration problems caused by alcohol and drinking habits, and over-exposition to sunlight and ultraviolet radiation.

Use Phyll G-2 for treating all kind of wrinkles. Procell G-2 is an effective, easy-to-use product manufactured with highly advanced technology, duly tested through thousands of protocols.

Use Phyll G-2 with absolute confidence for treating expression lines in: Forefront, nose, cheeks, area around the eyes, nasogenian area, chin, area around the lips, peripalpebral area, deep scars, tumor scars, facial traumatism scars, acne scars, eruptive disease scars, increasing lips volume.

Contraindications

Could reactivate Herpes

Do not use in areas with inflammatory processes

Do not use near infections (abscesses)

Do not use near telangiectasia (could canalize the condition)

Do not use in upper eyelids or near the free edge of your lower eyelids.

How to use Phyll G-2

Phyll G-2 should be injected into the deep dermis first so that a base is created for the intermediate and superficial dermis.

Then work up to a higher infiltration plane in order to achieve a better result (do not work on the surface or undesired effects could appear). Use pressing forces for infiltrating. You should notice a resistance to the piston movement (use the skin white color as a guide into the process). A low quantity of product is preferred. Avoid overcorrecting.

Multi-center studies

Objective: Determining effectiveness, satisfaction and duration.

Patients: 403

Period: 30 days

Physicians 26

Centers 7

Follow-ups: Two years, each 180-day period.

Results:

First Semester:

Physician satisfaction 97%

Patient satisfaction 94%

Second Semester:

Physician satisfaction 96%

Patient satisfaction 95%

Third Semester:

Physician satisfaction 97%

Patient satisfaction 97%

Fourth Semester:

Physician satisfaction 95%

Patient satisfaction 96%

In some patients, 62% the implant effect remained after a year; 38% required a slight retouch.

It should be noticed that duration and success depend greatly on the Physician and the techniques used. No important reactions observed. Only local, slight reactions appeared.

Required test

No test is necessary unless particularly strong tendency to atopic reactions.

Reactions

No adverse reactions observed.

Implant session interval

Phyll G-2 should be administered in one session. Only very special cases may require one additional session. Allow 10 days before receiving a second injection.

Tolerance

Possible erythema and light skin reddening for a few hours.

Implant

life

Phyll G-2 will last for at least 3 years. However, annual retouches could be necessary, depending on the case.

Presentation

Phyll G-2 is offered in one box containing 1 vial 5 ml. and other one 4 vials 5 ml specially designe to preserve the product. Also in 1 package with (4) syringe 1-ml each with individual needles (30g-1/2") in specially designed boxes, for protecting the product against temperature variations. This product is manufactured under sterile atmosphere. Phyll G-2 is manufactured under strict quality controls. Dermatological and clinical tests are performed under international regulations governing the matter.

Storage

Do not refrigerate Phyll G-2. Keep at room temperature (5-25° Celsius).

Warning

Kuhra Vital guarantees the purity and quality of its products and will not be responsible for harm caused to third parties due to bad praxis.



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