

The innovative
approach for face
and body rejuvenation

Clinical Handbook



nithya

Endless beauty



About Euroresearch and our mission

Euroresearch is an Italian company that was founded in 1983. It operates in various pharmaceutical fields, with particular focus on research and development, marketing, licensing and trading.

With over 30 years of experience, Euroresearch has developed high quality products and positioned itself as a leading company in the collagen market. Because of well-established manufacturing processes, Euroresearch products typically have a high degree of purity and safety, thus ensuring optimum quality.

Euroresearch is dedicated to health care and its goal is to expand its range of products to better meet the needs of the medical class and of patients, either in hospitals or at home, assuring the necessary resources to provide educational programs and assistance to doctors and nurses.



How did we become collagen experts?

The company's mission began with the research and development of highly effective, innovative solutions for the treatment of severe chronic wounds. These wounds are hard to treat. It was found that type I equine collagen can effectively support the healing process of severe chronic wounds. A broad range of products based on equine type I collagen was created by Euroresearch. All products are 100% hypoallergenic, telopeptides and gelatine free. The efficiency of these collagen based products was proven by more than 50 studies in literature (e.g. Karr 2011, Baj 2017, Pallaske 2018). Today Euroresearch is a market leader in high quality, innovative wound care products and has positioned itself as a leading company in the collagen market.



Why is collagen important for our body?

Collagen is a fibrous protein that makes up the extracellular matrix (ECM) of human tissues, including: skin, tendons, ligaments, cartilage, bones and teeth. It represents about 25% of the total protein in the human body.

We find more than 28 types of collagen in the human body (Gattazzo 2014; Humphrey 2014; Thomas 2015).

Collagen performs many functions

- Provides the framework of our dermis
- Controls migration and synthesis of many cellular proteins
- Enhances physiological formation of fibroblasts, granulation tissue, collagen
- Facilitates the contact between platelets and coagulation factors (hemostasis)
- Aids the formation of new capillaries (angiogenesis)
- Binds water and keep the skin barrier moist and resistant
- Supports wound healing



Age related changes of dermal collagen

Among others, our dermis is made up by type I collagen (50-80%) type III collagen (10-15%), elastin (2%) and fibroblasts. Collagen helps maintain the firmness, tone and turgidity of the skin. Fibroblasts are the main cell population responsible for the production of collagen fibers (Humphrey 2009).

During a lifetime, proteins undergo changes

With aging, the collagen production by fibroblasts is decreased and collagen bundles are fragmented. The level of metalloproteinases is increased by ultraviolet radiation and degradation of collagen is quickened. Thus, dermal thickness in aged skin is decreased by 20% (Lee 2001, Fisher 2008, Rittié 2002). In order to rejuvenate our skin, collagen loss must be compensated. Fluids and creams cannot transport collagen to the ECM. Minimally invasive procedures are helpful to reactivate fibroblasts. However, they cause a prolonged downtime. Collagen based fillers were found to be an effective treatment to transfer collagen directly to the ECM and to rejuvenate the dermis (Baumann 2006, Kligman 1986, Narins 2003).



Nithya, equine collagen for skin rejuvenation

Nithya type I equine collagen is injected in the dermis, where it immediately replaces the loss of collagen and activates the natural production of new collagen while Nithya mousse and Nithya cream collagen is applied topically. Type I collagen directly helps build up the ECM, it activates fibroblasts, monocytes, and blood platelets and it stimulates the production of collagen fibers and neoangiogenesis.

Furthermore, collagen binds water and keeps the dermis moist and resistant. Various studies in animals and humans showed that Nithya is a low-risk treatment. In a multicenter study (including 72 female patients, 6 centers) statistically significant improvements after facial treatment with Nithya could be shown for positive volumetric effect, lifting of crow's feet and wrinkles, reshaping of face silhouette and improvement of skin smoothness, brightness and skin hydration. No adverse events were found. Rarely, patients reported burning, itching and mild hematoma after the injection (Sparavigna, 2017).



Why is Nithya the leading collagen booster?

1. Nithya injection is a low-risk treatment

Nithya is a sterile, hypoallergenic pure type I collagen, extracted from equine flexor tendons. Competitor products are mainly of bovine and porcine origin. It was found that bovine collagen comes with the risk of virus contamination (e.g. BSE) promoting the development of autoimmune diseases and causing hypersensitivity reaction in 3% of the population.

For that reason, allergy testing is mandatory four weeks prior to the treatment. (Baumann 2006, Kligman 1986, Hymphrey 2001, Lee 2014).

Nithya is available on the European market from 2016 and it is CE marked. Until today, no adverse event has been reported for Nithya treatments.

2. Nithya treatment is effective

The entire chain of type I collagen is extracted - no fragments. This is important, because only the entire chain can help support the ECM after injection.



Where on the body can Nithya be used?

- Face
- Neck
- Décolleté
- Hands
- Body

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What are the indications for the Nithya treatment?

- Post-traumatic lesions
- Facial acne scars
- Age-related skin imperfections
- Skin and dermis biorevitalization to give lightness
- Remodeling hereditary body and face conditions such as skin hypotrophy or hypotonia, or reduced skin elasticity
- Signs of facial fat loss (human immunodeficiency virus)

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Are there any contraindications to the Nithya treatment?

- Highly-vascular areas (e.g.genital, periorbital, glabella region)
- Bleeding disorders
- Active skin diseases
- Pregnancy, breastfeeding and children
- Medication like steroids
- Vascular collagen diseases
- Autoimmune connective tissue disorders
- Epilepsy not controlled by medications
- Patients prone to develop hypertrophic scars or keloids
- Hypersensitivity to collagen
- Porphyria
- Skin areas affected by inflammation and/or infection
- Immediate combination with laser, deep chemical peels, dermabrasion
- General exclusion criteria for injections

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Suitable precautions before the Nithya treatment

- No blood thinning drugs (e.g. aspirin, heparin) should be taken within one week before the treatment
- Avoid alcohol, nicotine and caffeine on the day of the treatment

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How is the Nithya solution prepared?

- The Nithya powder is diluted with saline or double distilled water
- The suspension should be prepared immediately before injection
- The suspension intended for single-use
- The remaining solution must be discarded

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How to treat with Nithya?

- The treatment area must be thoroughly disinfected
- Injection is performed with small caliber needles (30G)
- Injection is recommended at a 15° angle
- Nithya is injected into the deep dermis or epidermal-dermal border junction in micro droplets
- After injection, the treatment area has to be massaged slightly

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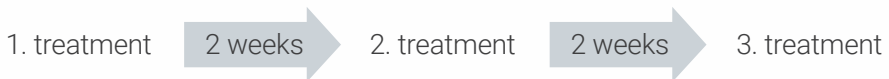
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Nithya face treatment protocol

Concentration: 70mg/5ml saline = 14mg/ml



Areas: face, neck, décolleté and hands

Recall treatment after 1 month

Next treatment after 6 months

Injection points: Face

■ Quantity 0,1 ml

Distance 2 cm

18 injection points = 1,8 ml

□ Quantity 0,05 ml

Distance 1 cm

23 injection points = 1,15 ml

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Injection points: Neck

- Quantity 0,05 ml
Distance 2 cm
9 injection points = 0,45 ml

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Injection points: Décolleté

- Quantity 0,1 ml
Distance 2 cm
11 injection points x 0,1 ml = 1,1 ml

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Injection points: Hands

- Quantity 0,05 ml
Distance 2 cm
10 injection points (2x5 on hand after 0,05 ml) = 0,5 ml

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After Nithya collagen treatment Nithya Collagen Mousse

Clean skin before application. Apply 2 to 4 times a day until skin is completely regenerated. Thanks to its formulation and texture, the mousse is the ideal complement to other therapies where collagen administration is necessary to support tissue regeneration.

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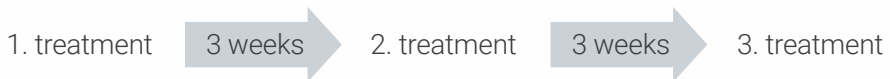
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Nithya body treatment protocol

Concentration: 200mg/10ml saline = 20mg/ml



Areas: body

- Recall treatment after 1 month
Next treatment after 6 months

Injection points: Body

- Concentration: 200mg/10ml saline = 20mg/ml
How many "hand surface area" can we treat? 200mg = 11%
11% approx. 11 "hands"

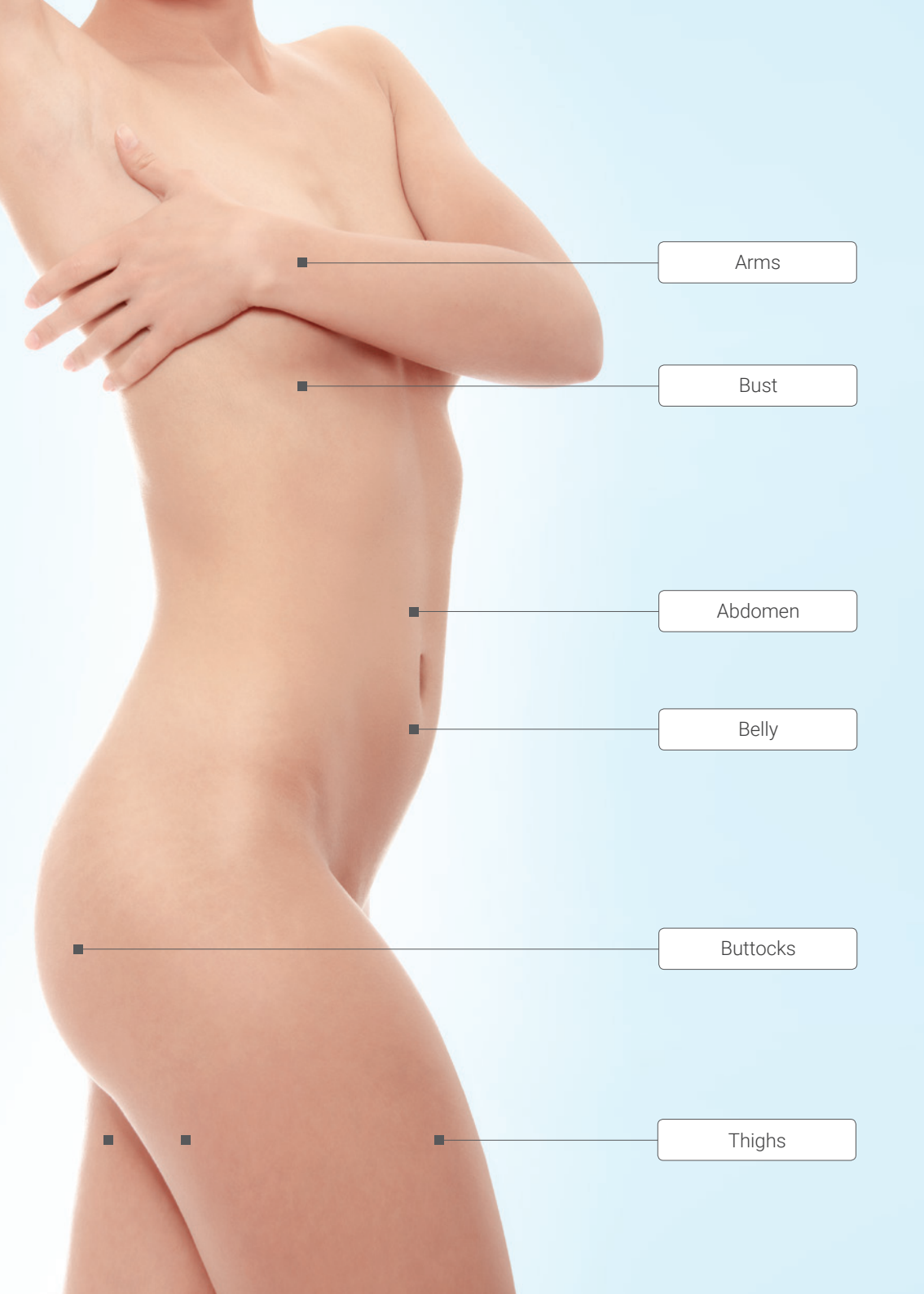
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Arms

Bust

Abdomen

Belly

Buttocks

Thighs



After Nithya collagen treatment Nithya Collagen Body cream

Apply the product morning and evening,
promoting its absorption with a light massage.

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Key points after the Nithya treatment

- No make-up or creams for 2 hours after the treatment
- Daily use of skin care products with sun protection factor 50
- No sun-bathing or saunas for 2 days
- No sports for 2 days
- No facial massages or lymphatic drainage for 2 days

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Are there any side effects of the Nithya treatment?

No side effects after treatment have been reported until today.

Potential side effects:

- Slight stinging sensation (minutes)
- Inflammatory reactions, itching, pain
- Hematoma
- Nodules at the injection site
- Coloration or discoloration
- General side effects after injections

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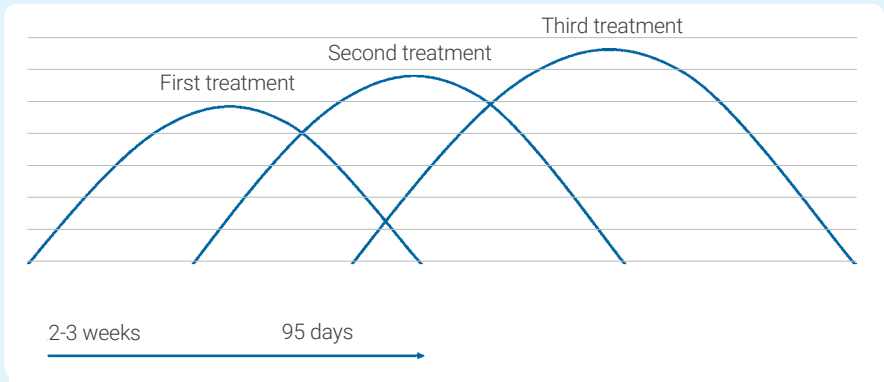
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When is the treatment result evident?

Immediately after the injection of Nithya, the product spreads in the dermis and attracts water. Thus, the skin becomes moist, thicker and gets a more youthful appearance. When the collagen degrades, fibroblasts are activated to replace the collagen loss.

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How long does the treatment result last?

The half-life of fibrillar collagen has been reported to be approx. 95 days for skin in middle-aged to older humans and 52 days for tendons and ligaments (Humphrey 2014).

It is recommended to repeat the Nithya treatment after 6 months. Depending on the individual health conditions and external influences (e.g. smoking, UV radiation) the interval between treatment sessions can differ individually.

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Main advantages of the Nithya treatment

- Minimal-invasive treatment
- Nearly no downtime
- Treatment nearly pain free
- No adverse events known until today
- Sterile, hypo-allergenic, non-toxic pure type I collagen
- Biodegradable and bioabsorbable

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