



Hyaluronic acid-based filling and modelling solution
of the dermal matrix with antioxidants

Fragmyx®
Oxyx

 **ceraZen lab**
exclusive formula

From the research laboratories of Aerazen Lab, a 100% Italian company, **FRAGMYX® OXYX**, is born, an innovative CE class 3 injectable medical device certified by the National Institute of Health. FRAGMYX® OXYX consists of a filling and modeling solution of the dermal matrix containing:

① **Fragments of Hyaluronic Acid**

③ **Antioxidants** to support the contrasting action against the physiological damage caused by free radicals

② **Amino acids** precursors of collagen, elastin and glycosaminoglycans

④ **Buffer system** based on phosphates



PROPERTIES AND COMPONENTS

FRAGMENTS OF HYALURONIC ACID (up to 38 monomers)

Hyaluronic acid binds to particular proteins, called ialadrine, influencing their function; these are called "binding proteins".

Scientific studies, in vitro and in vivo, have highlighted its particular predilection for binding with the membrane protein CD44.

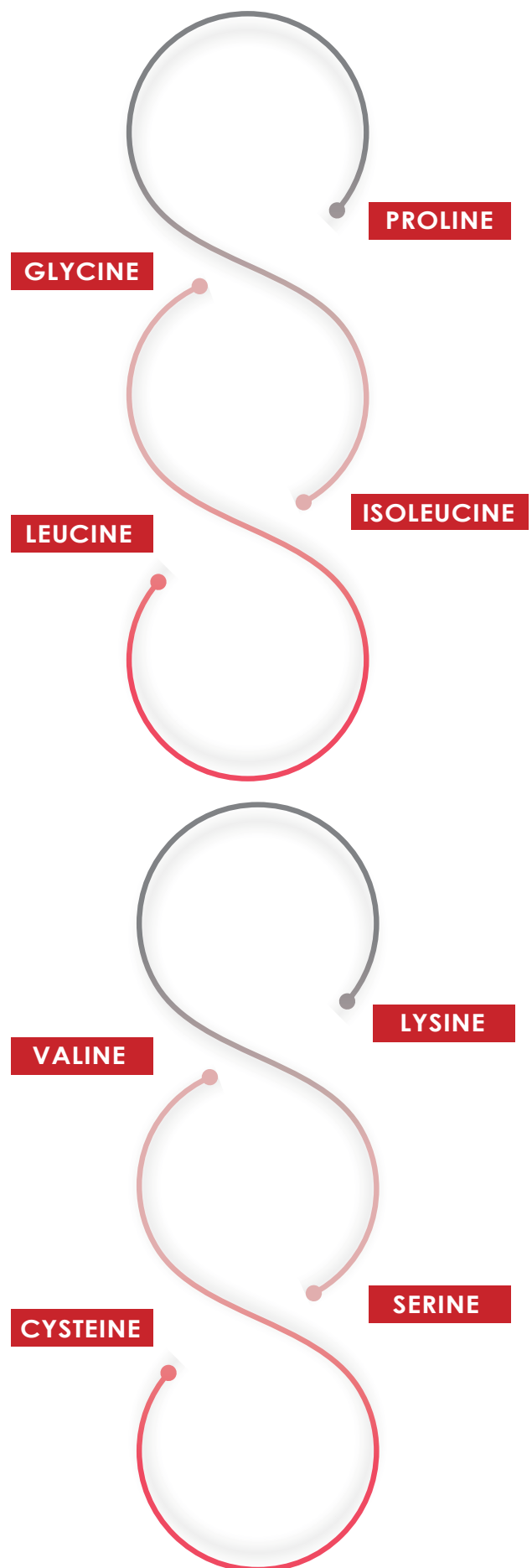
At the fibroblastic level, the activation of the **CD44 receptor** operated by hyaluronic acid not only conditions its synthesis activity, enhancing it, but also increases its migratory capacity towards the sector where its restorative action is most needed.

In particular, it increases the production of type III collagen, specific to young skin, thus inducing a real dermal regeneration.

In this sense, it is useful to underline that other macromolecular hyaluronic acid-based treatments would stimulate other receptors, such as CD39 and CD40, which through the production of fibrotic collagen would induce the distension of the epidermis but not its regeneration. The difference between the macromolecular HA and the **fragmented HA** consists, therefore, in the ability of the latter to fix itself directly on the fibroblastic membrane, further multiplying the stimulus and therefore synthesis activity.

AMINO ACIDS, REVITALIZATION AND ANTIOXIDANTS

About 22% of the skin's content is made up of proteins. With advancing age, the amount of **Amino acids** available to fibroblasts, necessary for the formation of collagen, is drastically reduced. To restore a correct synthesis activity, the presence of Glycine, Proline, Leucine and lysine is therefore of fundamental importance.



- **Proline** is an amino acid with several beneficial properties including strengthening of connective tissue and skin health.

- **Glycine** performs multiple actions in our body: the most important one consists in restarting the mitochondrial functionality of the senescent fibroblasts, which, producing new energy, resume the activity of protein synthesis, and therefore also of collagen, whose main component, more than 30%, is constituted, moreover, by the same glycine.

- **Leucine** and **Isoleucine**, essential amino acids, stimulate the secretion of growth hormone by promoting tissue reconstruction. They are

also used in the prevention of hair loss.

- **Lysine**, in its hydroxylated form, thanks to the interaction of Vit. C, activates the formation of collagen, allowing MEC, the extra cellular matrix, to support and tone the skin; in addition, it also has a repairing function for damaged hair and, in synergy with methionine, plays an important role in the treatment of alopecia.

- **Valine** strengthens and regulates the functions of the skin, actively participating in the repair and healing processes.

- **Serine** is a powerful anti-inflammatory and detoxifier

for the body. Essential component of membrane phospholipids, it promotes proper activity of fibroblasts by regulating the functionality of DNA and RNA, also enhancing the immune system.

- **Cysteine** is used at a structural level, by our body, for the formation of the hair; in the form of Cystine, in fact, it constitutes the keratin of the hair. It plays a fundamental role in the synthesis of proteins that make up the muscles and its correct intake reduces the risk of damage to the skin.

In combination with glycine and glutamic acid it forms the tripeptide Glutathione.



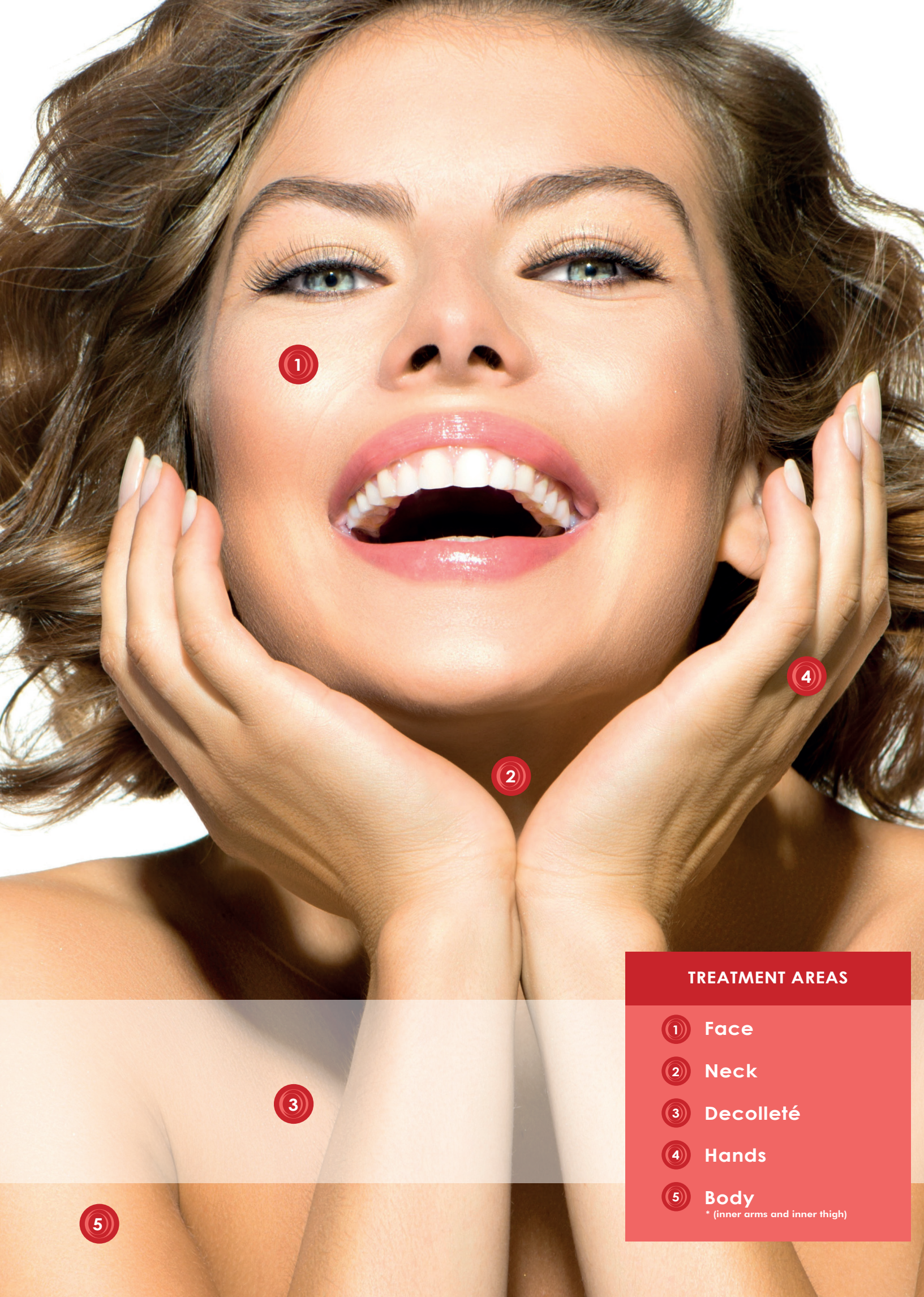
In this regard, one of the main components of **FRAGMYX® OXYX** is **reduced Glutathione**. It is the most important antioxidant system of our organism, fundamental for its detoxification action against free radicals and harmful substances. Its active form, reduced glutathione, neutralizes free radicals, responsible for cellular damage, turning into passive form, oxidized glutathione. Thanks to the enzyme glutathione reductase, it is able to regenerate in the reduced form and resume its activity. Thanks to the enzyme glutathione reductase, it is able to regenerate in To ensure effective cellular protection, the reduced glutathione/oxidized, glutathione ratio must remain 9:1; a lower ratio causes stress and cellular damage.

FRAGMYX® OXYX also contains **Sodium Ascorbyl Phosphate** (SAP), called the "perfect" form of **VITAMIN C**, which is released in the form of ascorbic acid, much more stable, bioavailable and resistant to oxidative processes. It has antioxidant action: it stimulates fibroblasts by promoting the formation of collagen and thus counteracting skin aging. Preventing the formation of melanin, it is also used as a lightening of skin spots, evening out their color and enhancing their brightness.

FRAGMYX® OXYX is equipped, finally, with a **buffer system consisting of phosphates**, able to perfectly maintain the state of sol of the colloidal solution of MEC, an essential condition for the active mechanisms of elimination of toxic waste of cellular metabolism.



**It contains:
5 5 ml vials for intradermal use**



TREATMENT AREAS

- ① Face
- ② Neck
- ③ Decolleté
- ④ Hands
- ⑤ Body
* (inner arms and inner thigh)

INDICATIONS

For all skin types, and in all areas that need revitalization in the presence of photoaging, chronoaging and skin discoloration.

The treatment will be carried out by the doctor through an injection in small doses with fully customizable protocols.

Photoaging and Chronoaging

- first cycle, one session every 7-10 days;
- second cycle, one session every 15 days.

Maintenance: one session every 4/6 months.

Light revitalization and increased brightness

- one session every 15/20 days for 3 treatments.

Maintenance: one session every 4/6 months.

Discoloration

- inject the solution directly into the stain repeating the treatment every week until completely bleached.

RECOMMENDED AREAS

Face, Neck, Decolleté, hands, areas more prone to skin sagging such as inner arms and inner thigh.





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