# Efficacy evaluation of non-crosslinked Hyaluronic Acid associated with Amino Acids and Resveratrol for Skin Photoaging

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## INTRODUCTION

Application of dermal implants containing Hyaluronic Acid (HA) corrects the signs of skin aging and dermal atrophy by restoring hydration and normal skin appearance.
Depending on the degree of skin photoaging and its condition, HA can provide satisfactory results both as a single treatment and/or as one of the stages of a treatment.
The objective of the study is to evaluate the efficacy achieved in the improvement of the skin photoaging, as well as to evaluate their degree of satisfaction before and after the treatment. The study conducted in international multi-center and involved 51 patients.

## MATERIAL

3 ml pre-filled syringe with non-cross-linked HA (concentration of 45 mg/3ml) associated with a protective buffer containing antioxydants: amino acids - Glycine, Leucine, Lysine HCl, Proline, Alanine, Arginine Aspartate, Histidine, Isoleucine, Glutamine, Serine, Valine, Threonine, Phenylalanine, Tyrosine -, and resveratrol (CE-marked Medical Device Class III, RRS® Hyalift® 75 Proactive, Skin Tech Pharma Group, Spain)

## INJECTION TECHNIQUE

Injections performed using a 30G needle intradermally. Total volumen per treatment distributed: 1.5 ml side / 3.0 ml for the full face.

## PROTOCOL

**Day 0.**
**1.** Selection of the patient according to indication. Inclusiona and exclusion criterias.
**2.** Skin Examination: texture, thickness, skin type, turgor, flaccidity, general condition. Picture before.
**3.** Treatment performance: hydrogel injected using a 30G needle intradermally. Total volume per treatment distributed following scheme 1 (See Figure 1): 1.5 ml side / 3.0 ml for the full face.
**4.** Adverse advents monitored during and after the treatment. Picture after.

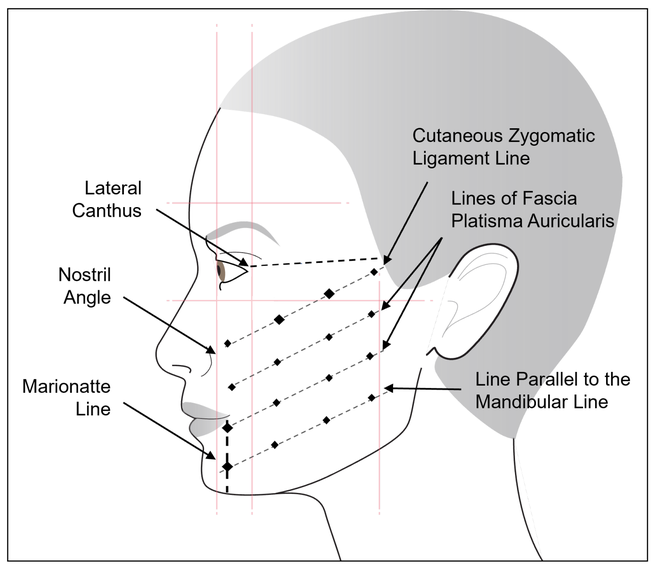
**Day 14.**
Treatment repetition. Same conditions as day 0.

**Day 21. Control visit.**
Determination of skin and evaluation of results, monitoring adverse events.

For the evaluation of results, numerical scales from 0 to 10 were used for parameters of safety, efficacy, ease of use, local effects of application. Practitioner and patients evaluated the treatment.

## SAFETY EVALUATION

No allergic reactions, local or systemic adverse reactions have been observed.




| | |
|---|---|
| **INJECTION DEVICE** | 30G needle |
| **INJECITON DEPTH** | Intradermal |
| **VOLUME PER POINT** | 0.05 mL |

**Figure 1 - Application Scheme RRS® Hyalift® 75 Proactive**

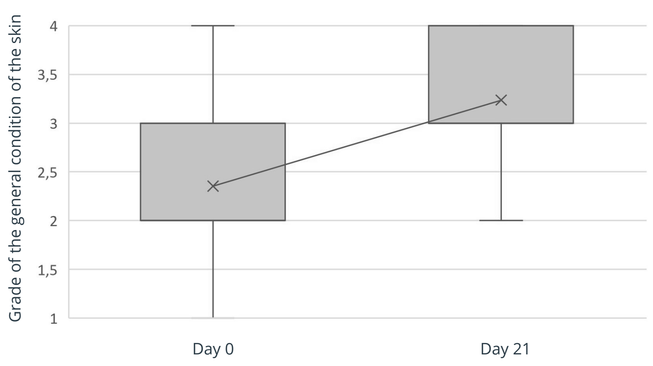



**Figure 2 - Skin condition evaluation** - *The grades were distributed as follows: 4 – very good, 3 – good, 2 – moderate, 1 – bad.*

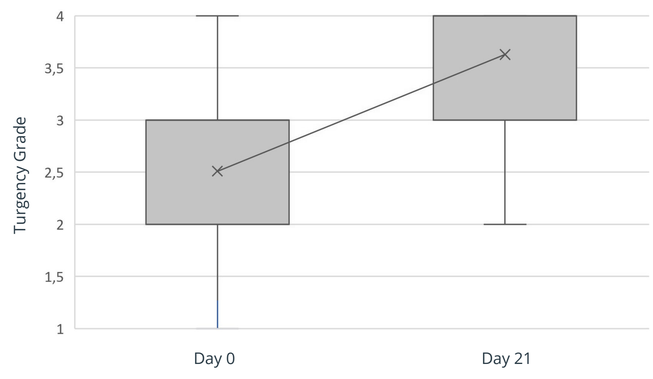



**Figure 3 - Skin turgor evaluation** - *The grades were distributed as follows: 4 – very good, 3 – good, 2 – moderate, 1 – bad.*

## PHYSICIAN ASSESSMENT RESULTS

### Skin condition evaluation

Increase in the parameter of the general condition of the skin by the descriptive visual scale, from 2.35 (ranging from 1 to 4) before treatment to a mean grade of 3.24 (ranging from 2 to 4) on day 21 has been observed. (See Figure 2)

### Skin turgor evaluation

Significant increase in the skin turgor according to the descriptive visual scale, from an average grade of 2.50 (varying from 1 to 4) before treatment to an average grade of 3.62 (with a variation from 2 to 4) on the day 21. (See Figure 3)

### Physician satisfaction

100% of investigators rated product efficacy and its adherence to expectation as excellent (82%) and good (18%).

## PATIENT ASSESSMENT RESULTS

90% of patients evaluated compliance with their expectations and efficacy of the product as excellent (76%) and good (14%).

98% of patients reported skin condition after treatment as excellent (76%) and good (22%).

## CONCLUSIONS

The outcomes of the case reporting activity reaffirm the product's remarkable efficacy while underscoring its exceptional safety profile. The use of novel monophasic dermal implant, RRS® Hyalift® 75 Proactive, containing non cross-linked hyaluronic acid associated with antioxidants: amino acids and resveratrol, for face rejuvenation proves to be a safe and effective non-surgical intervention, successfully reducing signs of facial photoaging while maintaining high safety standards.

Bibliography: 1. Contet-Audonneau JL, Jeanmaire C, Pauly G. A histological study of human wrinkle structures: com-parison between sun-exposed areas of the face, with or without wrinkles, and sun-protected areas. Br J Dermatol. 1999 Jun;140(6):1038-47. 3. Fallacara A, Baldini E, Manfredini S, Vertuani S. Hyaluronic Acid in the Third Millennium. Polymers (Basel). 2018 jun 25;10(7):701.4. Urdiales-Gálvez F, Delgado NE, Figueiredo V, Lajo-Plaza JV, Mira M, Moreno A, Ortíz-Martí F, Del Rio-Reyes R, Romero-Álvarez N, Del Cueto SR, Segurado MA. Treatment of Soft Tissue Filler Complications: Expert Consensus Recommendations. Aesthetic Plast Surg. 2018 Apr;42(2):498-510. 5. Becker LC, Bergfeld WF, Belsito DV, Klaassen CD, Marks JG Jr, Shank RC, Slaga TJ; Cosmetic Ingredient Review Expert Panel, Andersen FA. Final report of the safety assessment of hyaluronic acid, potassium hyaluronate, and sodium hyaluronate. Int J Toxicol. 2009 jul-Aug;28(4 Suppl):5-67.


**Clinical case 1. 48-year-old patient**
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Dr. Inma González.


**Clinical case 2. 48-year-old patient**
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**Clinical case 3. 47-year-old patient**
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