Review Article
PJMSA Journal
www.PJMSA.com

Pakistan Journal of Medical & Surgical Aesthetics
2025;1(3):111-123.

Hyaluronic acid skin boosters in aesthetic medicine: A comparative review of RRS Hyalift 75 syringe, Jalupro SuperHydro, Profhilo, and Monalisa skin in the Egyptian market

Noury Adel[1], Amira Gindi[2], Jack Kolenda[3], Francisco Llano[4], Nenad Stankovic[5], Monica Gindi[6], Jesper Thulesen[7], Ida Vega Thulesen[8]

[1] Oral and Maxillofacial Surgery Specialist, Private Practice, Cairo, Egypt.
[2] Registered Nurse Practitioner, Private Practice, Toronto, Canada.
[3] Assistant Professor, Department of Otolaryngology Head and Neck Surgery, University of Toronto, Toronto, Canada.
[4] Specialist in Regenerative Medicine, Specialist in Facial and Body Aesthetics, Private practice, Estado de Mexico, Mexico.
[5] Doctor of Dental Surgery, Specialist of Cosmetology, Private practice, Belgrade, Serbia.
[6] Internal Medicine doctor, Private Practice, Toronto, Canada.
[7] Oculoplastic surgeon, private practice, Copenhagen, Denmark.
[8] Eye Department, Roskilde University Hospital, Roskilde, Denmark.

Abstract

Hyaluronic acid (HA) skin boosters have become integral to modern aesthetic medicine as demand grows for minimally invasive, regenerative, and natural looking rejuvenation therapies. This review examines four widely utilized HA based products available in the Egyptian market; RRS Hyalift 75 syringe, Jalupro SuperHydro, Profhilo, and Monalisa Skin, focusing on their biochemical properties, mechanisms of action, clinical evidence, injection protocols, safety, and therapeutic indications. By comparing their composition, rheological characteristics, biostimulatory potential, and longevity, the article provides a clinically relevant guide to optimizing brand specific selection in aesthetic practice. Despite variations in formulation, all reviewed products demonstrate strong safety profiles and efficacy in improving hydration, elasticity, and dermal quality. Continued comparative research, especially head to head trials, is needed to standardize treatment pathways and expand their therapeutic applications.

Keyword: Hyaluronic acid; Skin boosters; Biorevitalization; Profhilo; Jalupro SuperHydro; RRS Hyalift; Monalisa Skin.

Received: December 15, 2025 | **Revised:** January 05, 2026 | **Accepted:** January 06, 2026 | **Published:** January 06, 2026

Citation: Adel N, Gindi A, Kolenda J, Llano F, Stankovic N, Gindi M, Thulesen J, Thulesen IV. Hyaluronic acid skin boosters in aesthetic medicine: A comparative review of RRS Hyalift 75 syringe, Jalupro SuperHydro, Profhilo, and Monalisa skin in the Egyptian market. *Pak J Med Surg Aesthet*. 2025;**1(3)**:111-123.

Introduction

In recent years, aesthetic medicine has moved toward treatments that enhance the overall quality and vitality of the skin rather than simply modifying its contours. This shift reflects a growing understanding that youthful appearance is not defined solely by volume and shape, but also by the skin's hydration level, elasticity, smoothness, and structural resilience. Hyaluronic acid (HA) skin boosters have emerged as

Address or corresponding
Dr. Noury Adel (MSc, DHM,PHD),
Oral and Maxillofacial Surgery Specialist,
Private practice, Cairo, Egypt.
Ph:+201020237551
Email: dr.noury100@gmail.com

an important response to this need, offering a biologically harmonious method for restoring hydration, improving dermal architecture, and supporting long term skin health. They are now widely integrated into rejuvenation protocols because they achieve results that remain subtle, natural, and well tolerated across diverse patient populations.[1-3]

The therapeutic value of skin boosters becomes clearer when considering the central role of hyaluronic acid within the extracellular matrix. HA is a large, hydrophilic molecule capable of binding substantial quantities of water, which helps maintain dermal turgor and supports the diffusion of nutrients through the tissue. It also contributes to viscoelastic balance, modulates inflammatory signaling, and acts as a scaffold that guides fibroblast behavior. Over time, intrinsic aging processes and cumulative exposure to environmental stressors cause a gradual decline in endogenous HA production. Collagen fibers lose their organized alignment, the extracellular matrix becomes less dense, and the skin starts to display features such as fine wrinkles, dryness, and diminished elasticity. The introduction of exogenous HA into the dermis therefore represents a physiologically compatible strategy to counteract these changes.[4,5]

A crucial distinction in understanding HA based injectable lies in the difference between non cross linked and cross linked HA. Non cross linked HA consists of free polymer chains that closely resemble natural HA found in youthful skin. Because it is not chemically interconnected, it spreads softly and uniformly through the dermis, making it ideal for enhancing hydration and improving surface quality. Its drawback, however, is its susceptibility to rapid enzymatic degradation, which shortens its duration of effect. Cross linked HA, on the other hand, undergoes a process in which the polymer chains are chemically or physically bonded. This creates a more stable and cohesive structure that resists breakdown, prolonging the product's persistence. While heavily cross linked gels are typically used in volumizing fillers, skin boosters employ either lightly cross linked HA or novel stabilization technologies that prolong longevity without adding unnecessary firmness.[6,7]

Advances in biomaterials science have significantly expanded the capabilities of skin boosters, giving rise to different categories of engineering technologies. One widely adopted approach involves the use of hybrid cooperative complexes, in which high-molecular weight and low–molecular weight HA are thermally fused through controlled heating and cooling cycles. This method increases stability by encouraging molecular entanglement rather than relying solely on chemical cross linking agents. The result is a formulation that maintains fluidity while achieving greater resistance to enzymatic degradation. Other boosters incorporate bio-restructuring additives such as amino acids, peptides, and antioxidant molecules. These components serve as metabolic co factors for fibroblasts, supporting protein synthesis and enhancing collagen and elastin formation. Thermal stabilization techniques, optimized pH conditions, and advanced purification steps further refine the rheology and biocompatibility of HA gels, producing formulations that integrate smoothly into the dermis and stimulate tissue renewal more effectively.[8,9]

Through these engineering innovations, modern skin boosters function not only as hydrating agents but also as stimulators of dermal remodeling. Once injected, the HA network provides a hydrated microenvironment that supports fibroblast proliferation and enhances the synthesis of collagen types I and III. It also contributes to reorganizing fragmented elastin fibers, improving skin elasticity and resilience. Over time, this biochemical support translates into clinically visible improvements in smoothness, density, and luminosity. Patients often report a more refreshed appearance, with better skin texture and a reduction in fine lines that does not rely on volumizing effects.[10]

In Egypt, where sunlight intensity and climatic conditions frequently influence moisture balance and contribute to early manifestations of dryness or photoaging, HA skin boosters have become an integral

part of aesthetic practice.[11,12] They offer a versatile and gentle approach suitable for a broad spectrum of patients, from young adults seeking preventative care to older individuals aiming to restore tissue vitality. Among the widely used formulations in the country are RRS Hyalift 75 syringe, Jalupro SuperHydro, Profhilo, and Monalisa Skin. Each of these boosters is built upon a different engineering concept, resulting in unique rheological behaviors, injection patterns, and treatment outcomes. Despite their widespread clinical use, there remains a need for comprehensive comparative evaluation that highlights how each technology functions, how it interacts with dermal biology, and how it can be matched to specific patient needs.

The Egyptian aesthetic market presents unique considerations due to high ultraviolet exposure, climatic stressors, and a growing demand for minimally invasive rejuvenation procedures, which influence skin aging patterns and treatment selection.

The purpose of the present review is to offer a detailed and clinically oriented comparison of these four HA skin boosters. By examining their molecular composition, stabilization methods, mechanisms of dermal integration, biostimulatory effects, injection techniques, and expected outcomes, this article aims to provide practitioners with a deeper understanding of how these formulations differ and how they may be applied most effectively. Such insight is essential for optimizing treatment strategies, ensuring predictable results, and supporting the continued evolution of skin quality focused aesthetic medicine.

Literature Review Strategy

A structured literature review was conducted to identify available preclinical and clinical evidence related to injectable hyaluronic acid based skin boosters. Searches were performed in PubMed/MEDLINE, Scopus, and Google Scholar up to December 2025. Search terms included combinations of “hyaluronic acid,” “skin booster,” “biorevitalization,” “bioremodelling,” “injectable,” “skin quality,” and the individual product names (RRS Hyalift, Jalupro, Jalupro SuperHydro, Profhilo, Monalisa Skin).

Inclusion criteria comprised peer-reviewed in vitro studies, animal models, clinical trials, and observational studies evaluating biological mechanisms, safety, or clinical outcomes related to dermal hydration, remodeling, or skin quality. Exclusion criteria included non–peer-reviewed promotional materials, conference abstracts without full data, and studies unrelated to dermatologic or aesthetic applications.

Due to heterogeneity in study design, outcome measures, and the limited availability of clinical trials for some products, a formal systematic review or meta-analysis was not feasible. Therefore, findings are presented as a narrative comparative review, with explicit acknowledgment of evidence gaps and limitations.

Background: Hyaluronic acid structure, function, and dermal integration

Hyaluronic acid is a key glycosaminoglycan naturally present in human skin, where it plays an essential role in maintaining hydration, structural stability, and cellular signaling. It is composed of repeating units of N-acetylglucosamine and glucuronic acid, forming long, unbranched polymer chains capable of binding large quantities of water. This remarkable hydrophilicity allows HA to create a gel like environment that preserves tissue elasticity and supports the diffusion of nutrients, oxygen, and growth factors within the dermal matrix.[13,14]

In youthful skin, HA is abundant and evenly distributed across the epidermis and dermis. Its presence contributes to the plump, smooth, and luminous appearance that characterizes healthy tissue. As part of normal aging, however, HA synthesis declines while hyaluronidase mediated degradation

increases. These changes are compounded by cumulative exposure to sunlight, which alters the balance of matrix remodeling enzymes and disrupts collagen and elastin networks. The progressive reduction of HA leads to decreased skin hydration, reduced firmness, and early fine wrinkling, making HA replenishment a logical therapeutic target.[15]

Exogenous HA administered through injectable therapy can restore some of the lost dermal function, but the behavior of the injected HA depends strongly on its molecular structure and degree of stabilization. Non cross linked HA retains the fluid, free flowing character of natural HA. It integrates easily throughout the dermis and provides rapid hydration, but it is also quickly broken down due to its vulnerability to enzymatic degradation. Cross linked HA, in contrast, undergoes chemical modification through agents such as BDDE (1,4-butanediol diglycidyl ether) or through physical processes such as thermal fusion. These methods create bridges between HA chains, producing a more cohesive network that persists longer within the dermis.[16]

Recent advances in HA engineering have introduced hybrid technologies designed to maximize stability while preserving natural tissue integration. These include thermal hybridization, controlled molecular weight blending, and the incorporation of bioactive molecules that support fibroblast metabolism. Such technologies aim to extend longevity without creating the rigid, volumizing properties typical of traditional dermal fillers. As a result, contemporary skin boosters act not merely as hydrating agents but as modulators of dermal health, enhancing collagen and elastin synthesis while improving overall skin quality.[17]

Understanding these foundational principles is essential before examining the characteristics of individual HA skin booster products. Each formulation relies on its own combination of HA concentration, molecular weight distribution, stabilization method, and additional bioactive components. These factors directly influence the product's spreadability, duration, delivery technique, and clinical role within an aesthetic treatment plan.

Comparative review of some hyaluronic acid skin boosters

The growing diversity of hyaluronic acid skin boosters reflects the continuous evolution of biomaterial engineering in aesthetic medicine. Although all boosters aim to improve hydration and enhance dermal quality, each formulation is shaped by specific manufacturing strategies, stabilization methods, and biochemical additives that determine its clinical behavior. Understanding these differences is crucial for selecting the most appropriate product for individual patient needs. The following section provides a detailed overview of four widely used HA skin boosters, highlighting their composition, scientific principles, manufacturer background, and distinctive clinical features.

RRS Hyalift® (Skin Tech Pharma Group, Spain)

RRS Hyalift 75 syringe belongs to a family of biorevitalization injectables developed by Skin Tech Pharma Group in Spain. This product is formulated primarily with non cross linked hyaluronic acid combined with a targeted blend of vitamins, antioxidants, and trace elements. Its design aims to restore hydration while delivering supportive micronutrients that assist fibroblast metabolism. Because it contains unmodified HA chains, RRS Hyalift 75 syringe spreads smoothly across the dermis and provides rapid improvement in suppleness and brightness. Its relatively low viscosity allows for fine, superficial injections, making it suitable for delicate areas or patients seeking mild enhancement without any volumizing effect. The presence of antioxidant and restorative components may also support recovery in skin that has experienced early signs of photoaging. As a non cross linked formulation, its longevity is shorter than stabilized technologies, but its softness and versatility make it useful for repeated treatments or maintenance protocols.

Jalupro SuperHydro® (Professional Derma SA, Switzerland)

Jalupro SuperHydro is produced by Professional Derma SA in Switzerland and represents an advanced evolution of the Jalupro line. Its formulation combines hyaluronic acid with a curated selection of amino acids that serve as essential substrates for collagen and elastin synthesis. These amino acids, which include glycine, proline, and lysine among others, provide fibroblasts with biochemical building blocks required for effective extracellular matrix repair. The HA component of Jalupro SuperHydro is lightly stabilized to prolong dermal residence without compromising spreadability. As a result, this booster achieves deeper biorestructuring effects than simple hydration alone. Clinically, it is often chosen for patients with early to moderate signs of dermal thinning, fine wrinkles, or loss of elasticity. The dual mechanism of hydration and metabolic stimulation gives it a distinctive profile, making it suitable for revitalizing areas that require both immediate smoothing and longterm support of collagen renewal.

Profhilo® (IBSA Pharmaceutical, Italy)

Profhilo is manufactured by IBSA Pharmaceutical in Italy and is recognized internationally for its unique hybrid cooperative complex technology. Unlike traditional fillers, Profhilo is produced through a patented thermal process known as NAHYCO technology, which fuses high-molecular weight and low-molecular weight hyaluronic acid without the use of chemical cross linking agents. This results in a highly stable, high concentration gel that maintains fluidity while resisting enzymatic breakdown. The thermal hybridization encourages molecular entanglement, creating a structure that remains cohesive but does not behave like a volumizing filler. Once injected, Profhilo diffuses widely through the dermis, improving hydration and promoting fibroblast activity. Its high HA concentration generates a favorable biochemical environment that stimulates collagen and elastin production, leading to better elasticity and firmness over time. Because of its unique rheology, Profhilo is administered through a standardized set of bioaesthetic injection points, ensuring even distribution across the treatment area. It is often selected for patients seeking overall improvement in skin quality, particularly along the midface, lower face, neck, and other regions where firmness and support have diminished.

Monalisa Skin® (GENOSS Company, South Korea)

Monalisa Skin is produced by GENOSS, a medical device company based in South Korea known for its development of HA fillers and dermatologic injectables. This product is formulated using non cross linked hyaluronic acid designed to have a low viscosity and high spreadability, making it suitable for patients who require gentle hydration, refined texture improvement, or early preventive care. Its softness allows it to integrate well even in thinner skin, such as the periorbital or perioral areas. Monalisa Skin works mainly through hydration and enhancement of the extracellular environment, improving luminosity and smoothness. While it does not possess the structural remodeling strength seen in hybrid technologies or amino acid–enhanced boosters, it is favored for subtle rejuvenation, maintenance sessions, or in younger individuals who want to preserve dermal quality. Its Korean engineering is characterized by high purification standards and consistency, contributing to good tolerability and predictable outcomes.

Comparative Perspective

Although all four products share the common purpose of enhancing dermal quality through hyaluronic acid supplementation, they differ significantly in their composition, stabilization technologies, rheological behavior, and biological impact. RRS Hyalift 75 syringe and Monalisa Skin rely predominantly on non cross linked HA, favoring hydration and superficial revitalization. Jalupro SuperHydro introduces bioactive amino acids that support deeper dermal repair and collagen formation. Profhilo occupies a category of its

own, relying on hybrid cooperative complexes that combine long lasting stability with extensive tissue diffusion. These distinctions shape not only the mode of injection and expected longevity but also the type of patient best suited to each product.

Understanding these characteristics enables practitioners to select the most appropriate booster for individual treatment goals, whether targeting hydration, fine lines, structural support, or overall dermal remodeling. This comparative knowledge serves as a foundation for personalized, effective, and scientifically grounded aesthetic care **(Table 1)**.

The table summarizes key characteristics including manufacturer and country of production, type of hyaluronic acid, functional additives, molecular weight profiles, proprietary technologies, rheological properties, injection depth, expected longevity, clinical indications, patient suitability, diffusion behavior, tolerability, and unique advantages. This comparative analysis highlights the distinctions among RRS Hyalift 75 syringe, Jalupro SuperHydro, Profhilo, and Monalisa Skin, providing clinicians with evidence-based guidance for product selection and personalized treatment planning.

Notes on HA concentrations

- RRS Hyalift 75 syringe contains non–cross-linked HA at 15 mg/ml, totaling 45 mg per 3 ml syringe, suitable for hydration and dermal revitalization.
- Jalupro SuperHydro contains 80 mg of HA in a 2.5 ml syringe, corresponding to a per-ml concentration of 32 mg/ml, combined with amino acids and peptides for enhanced fibroblast activity.

Table 1 Comparative overview of four widely used hyaluronic acid skin boosters available in the Egyptian aesthetic market.

Feature	*RRS Hyalift 75 syringe*	*Jalupro SuperHydro*	*Profhilo*	*Monalisa Skin*
Manufacturer	Skin Tech Pharma Group	Professional Derma SA	IBSA Pharmaceutical	GENOSS Company
Country of production	Spain	Switzerland	Italy	South Korea
HA type	Non–cross linked HA	Non–cross linked HA with amino acids	Hybrid cooperative complex of high and low molecular weight HA	Non–cross linked HA
Functional additives	Vitamins, antioxidants, trace elements	Amino acid blend supporting collagen and elastin synthetic Peptides	None (relies on hybrid HA technology)	None specified
HA concentration	15 mg/ml (45 mg total per 3 ml syringe)	32 mg/ml (80 mg total per 2.5 ml syringe)	32 mg/ml (64 mg total per 2 ml syringe)	32 mg/ml for 32+ variant;50 mg/ml for 50+ variant
Molecular weight profile	Medium molecular weight chains	Mixed low and high molecular weight HA	Hybrid of high and low molecular weight HA	Medium molecular weight chains
Technology used	Standard non cross linked HA biorevitalization	Amino acid enhanced biorestructuring	NAHYCO thermal hybridization technology	High purification non cross linked HA
Rheology and viscosity	Low viscosity, high spread ability	Medium viscosity, moderate cohesion	High cohesiveness with fluid diffusion	Low viscosity, smooth consistency
Mechanistic emphasis	Hydration and dermal metabolism support	Hydration plus stimulation of collagen/elastin synthesis	Dermal remodeling and extensive tissue diffusion	Hydration and superficial texture improvement
Intended depth of injection	Superficial dermis	Superficial to mid dermis	Dermal and superficial subcutaneous (via BAP technique)	Superficial dermis
Expected longevity	Short to moderate	Moderate	Long (hybrid complexes provide extended persistence)	Short to moderate
Main clinical indications	Early revitalization and hydration	Loss of elasticity, fine wrinkles, and dermal fatigue	Skin quality improvement and remodeling	Subtle hydration and texture enhancement

- Profhilo contains a total of 64 mg of HA in a 2 ml syringe (32 mg/ml each of high- and low-molecular-weight HA), using hybrid cooperative complexes for improved stability and diffusion.
- Monalisa Skin is available in syringe formulations with concentrations of 32 mg/ml (32+ variant) and 50 mg/ml (50+ variant), enabling formulation-dependent hydration intensity.

Clinical applications and evidence

Hyaluronic acid skin boosters are used widely in aesthetic medicine to improve dermal hydration, elasticity, texture, and overall skin quality. Although comparative clinical trials directly contrasting these injectables are limited, available evidence from observational studies, case series, and emerging clinical data supports their beneficial roles in skin revitalization and aesthetic enhancement.

For RRS Hyalift 75 syringe® (Skin Tech Pharma Group, Spain), in vitro research has demonstrated its capacity to directly influence dermal biology. Human skin fibroblasts exposed to RRS HA injectable showed a significant increase in cell viability, with approximately 15% higher proliferation compared to controls. Moreover, the product markedly stimulated gene expression of key extracellular matrix components, including type I collagen and elastin, with increases of 9.7-fold and 14-fold, respectively. However, confidence intervals and standardized statistical significance reporting were not consistently provided, and the direct clinical relevance of these in vitro findings remains uncertain. Though these findings suggest that RRS Hyalift not only provides hydration but also actively promotes dermal regeneration at the cellular level. Clinically, this translates into improvements in skin elasticity, firmness, and texture when applied through mesotherapy or biorevitalization protocols. The non cross linked HA formulation, combined with vitamins, antioxidants, and trace elements, ensures rapid dermal integration and high tolerability, supporting repeated sessions or maintenance treatments without adverse effects.[18] RRS Hyalift 75 can also be used for lip boosting, providing hydration and regenerative effects without volumization. Whether combined with low level laser therapy or not, it enhances fibroblast activity, collagen and elastin synthesis, and tissue recovery, resulting in smoother, revitalized lips with improved texture and natural appearance.[19]

For Profhilo® (IBSA Pharmaceutical, Italy), clinical evidence highlights its unique capability in dermal bio-remodeling, not only for the face but also for other commonly treated areas such as the neck, décolletage, and hands. A study of hybrid cooperative complex HA formulations show that a standard protocol involving two injection sessions spaced one month apart leads to measurable improvements in skin firmness, elasticity, and wrinkle reduction, with effects persisting for several months. Patients consistently report enhanced hydration and a more youthful, radiant appearance, while adverse events remain rare and typically limited to mild transient erythema or swelling. The hybrid HA technology of Profhilo, created via thermal stabilization of high- and low-molecular-weight chains, allows widespread tissue diffusion and stimulation of fibroblast activity, promoting collagen and elastin synthesis. These properties provide structural support and improve dermal quality without volumizing effects, making Profhilo suitable for both facial rejuvenation and rejuvenation of non-facial areas such as the neck, chest, and hands. This broad utility underscores its role as a versatile skin booster capable of improving overall tissue integrity and aesthetic outcomes.[20]

Although peer-reviewed clinical trials specifically on Jalupro SuperHydro® (Professional Derma SA, Switzerland) doesn't exist in published literature, mechanistic understanding and product reports suggest that its combination of hyaluronic acid with amino acids and biopeptides supports deeper connective tissue revitalization. Formulation descriptions indicate that the amino acid components potentially act as substrates for collagen and elastin synthesis, contributing to improved skin firmness and structural

support. As a deep biorevitalizer, Jalupro SuperHydro is often used in clinical practice for patients presenting with early signs of skin laxity or dehydration, with practitioners and some case series reporting improvements in texture, hydration, and subtle lifting effects. However there is no scientific published researches to support those claims.

Monalisa Skin® (GENOSS Company, South Korea) utilizes non cross linked HA designed for hydration and subtle dermal rejuvenation. Supporting evidence from an experimental study on Wister albino rats showed that HA injections into intraoral wounds created with a 450 nm diode laser resulted in faster healing. Specifically, treated wounds displayed accelerated collagen formation and well-organized granulation tissue by the third and seventh day, compared to controls. This demonstrates that non cross linked HA not only hydrates tissue but also promotes extracellular matrix organization and accelerates recovery.[21]

Across all four products, the clinical application typically involves multiple sessions spaced several weeks apart, with effects emerging within weeks and often peaking by one to three months. Skin boosters are favored for their minimal downtime and capacity to address concerns such as fine dehydration lines, early texture irregularities, and loss of elasticity without the need for more invasive procedures. While direct head to head trials remain scarce, the cumulative clinical experience suggests that each product contributes to dermal quality improvement, with differences in formulation guiding clinician choice based on treatment goals such as deeper remodeling, targeted hydration, or amino acid-mediated stimulation. Continued research, including randomized controlled trials with objective measures such as skin elasticity assessments and histological evaluation, will further elucidate optimal protocols and comparative effectiveness.

Limitations

This review has several important limitations. Most notably, no head to head randomized clinical trials directly comparing currently available hyaluronic acid skin boosters were identified. Consequently, comparative observations are based on indirect comparisons across separate studies with differing methodologies, populations, and outcome measures.

The quality and quantity of evidence also vary substantially among products. Profhilo is supported by multiple prospective clinical studies, whereas evidence for other formulations is limited to in vitro studies, animal models, formulation rationale, or clinical experience. In particular, peer-reviewed clinical trials specifically evaluating Jalupro SuperHydro are currently absent from the published literature, and evidence for Monalisa Skin is largely preclinical.

Several cited studies were industry sponsored, which is common in aesthetic medicine research but may introduce reporting or publication bias. Formal risk of bias assessment tools were not applied due to heterogeneity of study designs; therefore, conclusions should be interpreted cautiously and considered hypothesis generating rather than definitive.

Patient selection and treatment planning

Successful outcomes with hyaluronic acid skin boosters rely on careful patient evaluation and individualized treatment planning. Ideal candidates are individuals seeking subtle improvements in hydration, elasticity, and skin quality rather than volumization. They may present with early signs of photoaging, fine dehydration lines, superficial texture irregularities, or mild loss of firmness.

A thorough medical history is essential to identify contraindications, such as active skin infections, hypersensitivity to HA or additives, recent ablative procedures, or a history of herpes simplex virus in high-risk areas. Patients with autoimmune disorders or those on anticoagulant therapy require careful consideration and tailored injection strategies.

Assessment of skin type, thickness, and anatomical features guides the choice of product and injection technique. Non cross linked HA boosters, such as RRS Hyalift 75 and Monalisa Skin, are suitable for superficial hydration and fine texture improvements, while hybrid HA complexes like Profhilo or amino acid enhanced formulations like Jalupro SuperHydro may be preferred for deeper remodeling and elasticity support.

Treatment planning should also address safety measures to minimize risks, including slow, controlled injections, awareness of vascular anatomy, use of cannulas where appropriate, and aspiration as a precaution. For patients with a history of herpes infection, antiviral prophylaxis may be recommended when treating perioral or high-risk areas. Realistic goal setting, patient education on expected results and maintenance intervals, and clear communication about potential side effects are essential for satisfaction and adherence.

By combining clinical assessment with product-specific knowledge, practitioners can tailor HA skin booster treatments to individual patient needs, optimizing outcomes in a safe, predictable, and natural looking manner.

Injection techniques and protocols

Hyaluronic acid skin boosters are typically administered via intradermal microinjections using either fine needles or cannulas. Choice of instrument depends on treatment area, skin thickness, and risk mitigation. Needles are commonly used for precise microdroplet placement, while cannulas offer safer delivery in high-risk zones or larger surface areas, reducing the likelihood of bruising and vascular injury.

Injection techniques vary by product and treatment goal. RRS Hyalift 75 and Monalisa Skin are often delivered using microdroplets in the superficial dermis to maximize hydration and texture improvement, whereas Jalupro SuperHydro may be injected slightly deeper to enhance fibroblast stimulation. Profhilo is administered through standardized bioaesthetic points with spaced microboluses to ensure even diffusion and tissue remodeling across the dermis and superficial subcutaneous layer. In our clinical experience, we found that using cannulas to inject all the aforementioned products is a preferable alternative to needles, without any noticeable difference in postoperative patient satisfaction.

Session protocols generally involve 2-4 treatments spaced 2-4 weeks apart, with maintenance sessions scheduled every 3-6 months depending on patient age, skin condition, and desired outcomes. Injection volume per site is kept minimal to prevent irregularities, while slow, controlled pressure, knowledge of anatomical landmarks, and optional aspiration help minimize the risk of vascular occlusion.

Adjunctive measures such as low-level laser therapy may be employed to enhance fibroblast activity, particularly for lip boosting or delicate perioral treatments, providing hydration and regenerative effects without volumization. Practitioners must also evaluate patient history for allergy or prior herpes infection, with antiviral prophylaxis considered when indicated.

Overall, adherence to proper technique, careful product selection, and individualized treatment planning are key to achieving predictable, natural, and safe aesthetic results.

Combination treatments and adjunct therapies

Hyaluronic acid skin boosters can be effectively combined with other non-invasive aesthetic procedures to enhance outcomes and address multiple signs of skin aging. Common adjunct therapies include low-level laser therapy, microneedling, chemical peels, and radiofrequency treatments. These approaches act synergistically with HA injections by stimulating fibroblast activity, improving collagen and elastin synthesis, and enhancing tissue hydration and texture.

Low-level laser therapy, when paired with RRS Hyalift 75 for lip or perioral treatments, has been shown to boost fibroblast metabolism and accelerate regenerative effects, improving skin smoothness and tissue recovery without volumization. Microneedling and HA injections can be sequenced to optimize dermal penetration and uniformity, while superficial chemical peels may prepare the skin for enhanced absorption and renewal.

Careful planning is essential to reduce the risk of adverse events. For example, combining HA boosters with ablative or aggressive resurfacing procedures may increase the risk of viral reactivation, particularly herpes simplex, or compromise healing. Proper patient evaluation, prophylactic antiviral therapy when indicated, and sufficient healing intervals between procedures are necessary to maximize safety and efficacy.

The combination of HA skin boosters with adjunctive therapies offers a versatile approach for holistic skin rejuvenation. By tailoring protocols to individual patient needs, clinicians can achieve synergistic improvements in hydration, elasticity, texture, and overall skin quality, extending benefits beyond those provided by a single modality.

Safety and Adverse Effects

Hyaluronic acid skin boosters are generally considered safe and well tolerated, with most adverse effects being mild, transient, and self-limiting. Common reactions include localized erythema, swelling, tenderness, or minor bruising at the injection site, typically resolving within hours to a few days. These reactions are generally related to the mechanical aspects of injection rather than the HA formulations themselves.

In rare cases, additional complications may occur. Such as hypersensitivity, therefore patients with a history of allergy should be carefully evaluated prior to treatment. Viral reactivation, particularly herpes simplex, is another potential concern when treating perioral or facial areas, highlighting the importance of prophylactic measures in high-risk individuals or patients with a history of herpes infection who are undergoing skin booster injections, especially while receiving recent ablative laser treatments, require careful evaluation and appropriate prophylactic measures with antiviral medication.

Vascular complications, although uncommon, represent the most serious risk. Accidental intravascular injection can lead to vascular occlusion, tissue ischemia, necrosis, or, in periocular regions, visual impairment. To minimize this risk, practitioners should inject slowly with controlled pressure, understand the detailed anatomy of the treatment area, and consider using cannulas where appropriate. Aspiration before injection is often recommended as a precautionary measure, even though it may not reliably prevent intravascular placement, because it poses no harm and may provide an additional safety check.

Overall, when administered by trained professionals using appropriate protocols, RRS Hyalift 75, Jalupro SuperHydro, Profhilo, and Monalisa Skin exhibit excellent safety profiles. Awareness of patient history, careful technique, and adherence to recommended injection practices allow clinicians to maximize efficacy while minimizing the risk of complications, ensuring predictable, well-tolerated, and satisfactory aesthetic outcomes.

Recommendations and future perspectives

Hyaluronic acid skin boosters have become a cornerstone in minimally invasive aesthetic medicine, offering hydration, subtle rejuvenation, and dermal remodeling. Based on current evidence and clinical experience, the following recommendations can guide safe and effective practice:

Clinical Recommendations

- Tailor product selection to patient-specific needs: use non-cross-linked HA for superficial hydration, amino

acid–enhanced formulations for deeper remodeling, and hybrid HA for extensive tissue diffusion and structural support.

- Follow standardized injection protocols, including slow micro droplet with Nano needles or series of linear threads using cannula, knowledge of local anatomy, and the use of cannulas where appropriate to minimize risks.
- Screen patients for history of herpes infections, allergies, or recent ablative procedures, and consider prophylactic measures when indicated.
- Schedule multiple sessions spaced 3-4 weeks apart, followed by periodic maintenance treatments to preserve results.

Safety considerations

- Monitor for common adverse effects such as erythema, mild swelling, or bruising, which are generally self-limiting.
- Be vigilant about rare but serious risks, including vascular occlusion, hypersensitivity reactions, and viral reactivation. Preventive measures, careful technique, and patient education are essential.

Future directions

- Comparative head-to-head clinical trials are needed to better define product-specific advantages, optimal injection techniques, and long-term outcomes.
- Emerging hybrid formulations combining HA with bioactive molecules, peptides, or growth factors may enhance fibroblast stimulation and tissue remodeling.
- Integration with adjunctive therapies such as low-level laser therapy, microneedling, or mesotherapy may further improve clinical outcomes and patient satisfaction.
- Research on non-facial applications, including the neck, décolletage, and hands, will expand the role of skin boosters in comprehensive aesthetic care.

By combining evidence-based selection, precise injection technique, and ongoing innovation, practitioners can maximize both efficacy and safety, ensuring predictable and natural results for diverse patient populations.

Conclusion

Hyaluronic acid skin boosters offer a safe, minimally invasive approach to improving dermal hydration, elasticity, and overall skin quality. Products such as RRS Hyalift 75 syringe, Jalupro SuperHydro, Profhilo, and Monalisa Skin each bring unique formulations, stabilization methods, and mechanisms of action, allowing clinicians to tailor treatments to individual patient needs. Evidence from in vitro studies, animal models, and clinical experience demonstrates that these boosters not only provide immediate hydration but also stimulate fibroblast activity, collagen and elastin synthesis, and dermal remodeling. Careful patient assessment, knowledge of anatomy, proper injection technique, and awareness of potential risks including vascular occlusion, hypersensitivity, and viral reactivation are essential to maximize safety and efficacy. Continued research, particularly head-to-head clinical trials and studies exploring non-facial applications, will further refine treatment protocols and expand the therapeutic potential of HA skin boosters in aesthetic medicine.

Conflict of interest statement

The authors declare no commercial or financial relationships that could be construed as a potential conflict of interest.

Author's contribution

NA: Conceptualized the study, designed the methodology, collected and analyzed the data, drafted the manuscript, and critically revised it for intellectual content.

AG, JK, FL, NS, MG, JT, IVT: Reviewing the manuscript, providing suggestions for wording, and approving the final version for submission.

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