

## **DIRECTIONS FOR USE - USA**

### **Restylane<sup>®</sup> Refyne**

**Caution:** Federal (USA) law restricts this device to sale by or on the order of a licensed physician or properly licensed practitioner.

#### **BEFORE USING PRODUCT, READ THE FOLLOWING INFORMATION THOROUGHLY.**

#### **1. DEVICE DESCRIPTION**

Restylane<sup>®</sup> Refyne is a sterile, biodegradable, viscoelastic, non-pyrogenic, clear, colorless, and homogeneous soft hyaluronic acid gel with a moderate lifting capacity. The product has a sodium hyaluronate concentration of 20 mg/mL in phosphate buffered saline at pH 7 and contains 3 mg/mL lidocaine hydrochloride.

#### **2. INTENDED USE/INDICATIONS**

Restylane Refyne is indicated for injection into the mid-to-deep dermis for correction of moderate to severe facial wrinkles and folds (such as nasolabial folds) in patients over the age of 21.

#### **3. CONTRAINDICATIONS**

- Restylane Refyne is contraindicated for patients with severe allergies manifested by a history of anaphylaxis or history or presence of multiple severe allergies.
- Restylane Refyne may contain trace amounts of gram-positive bacterial proteins and is contraindicated for patients with a history of allergies to such material.
- Restylane Refyne contains lidocaine and is contraindicated for patients with a history of allergies to such material.

#### **4. WARNINGS**

- Introduction of Restylane Refyne into the vasculature may lead to embolization, occlusion of the vessels, ischemia, or infarction. Take extra care when injecting soft tissue fillers, for example inject the product slowly and apply the least amount of pressure necessary. Rare but serious adverse events associated with the intravascular injection of soft tissue fillers in the face have been reported and include temporary or permanent vision impairment, blindness, cerebral ischemia or cerebral hemorrhage, leading to stroke, skin necrosis, and damage to underlying facial structures. Immediately stop the injection if a patient exhibits any of the following symptoms, including changes in vision, signs of a stroke, blanching of the skin, or unusual pain during or shortly after the procedure. Patients should receive prompt medical attention and possibly evaluation by an appropriate health care practitioner specialist should an intravascular injection occur.
- Product use at sites in which an active skin disease is present, such as inflammation, infection,

or tumors, should be deferred until the underlying process has been controlled.

For additional information please see the Post-Marketing Surveillance in Adverse Events.

## **5. PRECAUTIONS**

- Restylane Refyne is packaged for single-patient use. Do not resterilize. Do not use if package is open or damaged.
- The safety and effectiveness for the treatment of anatomic regions other than the facial wrinkles and folds have not been established in controlled clinical studies.
- As with all transcutaneous procedures, dermal filler implantation carries a risk of infection. Standard precautions associated with injectable materials should be followed.
- Restylane Refyne is to be used as supplied. Modification or use of the product outside the Directions for Use may adversely impact the sterility, homogeneity, and performance of the product.
- The safety for use during pregnancy, in breastfeeding females, or in patients under 22 years has not been established.
- Restylane Refyne should be used with caution in patients on immunosuppressive therapy.
- Restylane Refyne should be used with caution in patients with bleeding disorders.
- Do not inject the product in a site that has been treated with a permanent implant.
- Patients who are using substances that can prolong bleeding (such as aspirin, nonsteroidal anti-inflammatory drugs, and warfarin) may, as with any injection, experience increased bruising or bleeding at treatment sites.
- If laser treatment, chemical peeling or any other procedure based on active dermal response is considered after treatment with Restylane Refyne, there is a possible risk of eliciting an inflammatory reaction at the implant site. This also applies if Restylane Refyne is administered before the skin has healed completely after such a procedure.
- Injections of Restylane Refyne into patients with a history of previous herpetic eruption may be associated with reactivation of the herpes.
- After use, treatment syringes and needles may be potential biohazards. Handle and dispose of these items in accordance with accepted medical practice and applicable local, state, and federal requirements.
- Restylane Refyne injectable gel is a clear, colorless gel without particulates. In the event that the content of a syringe shows signs of separation and/or appears cloudy, do not use the syringe; notify Galderma Laboratories, L.P. at 1-855-425-8722
- In order to minimize the risks of potential complications, this product should only be used by health care practitioners who have appropriate training, experience and who are knowledgeable about the anatomy at and around the site of injection.
- Health care practitioners are encouraged to discuss all potential risks of soft tissue injection with their patients prior to treatment and ensure that patients are aware of signs and symptoms of potential complications.
- Failure to comply with the needle attachment instructions could result in needle disengagement and/or product leakage at the Luer lock and needle hub connection.

## **6. ADVERSE EVENTS**

### **A. Clinical Evaluation of Restylane Refyne**

One hundred seventy (170) subjects were enrolled in a randomized, double-blinded (subject and evaluator), active controlled, split-face comparison clinical trial to evaluate the safety and effectiveness of Restylane Refyne vs. a non-lidocaine-containing comparator. Touch-up treatments occurred approximately 3 weeks after initial injection, as needed, to achieve volume correction. After 48 weeks, subjects could opt for retreatment with Restylane Refyne to both sides of the face, with a subsequent touch-up as needed 3 weeks afterwards. One hundred twelve subjects (112, 65.9%) opted for retreatment.

Preprinted diary forms were used by subjects for subject-reported assessments of specific signs and symptoms experienced during each of the first 21 days after initial, touch-up, and repeat treatments. Subjects rated each treatment site response as “Mild” “Moderate” “Severe” or “None.” Of the 170 subjects who received treatment, 98.8% (168 subjects) completed the diary forms. Of the 112 subjects who opted for retreatment, 97.3% (109) subjects completed the diary forms after retreatment.

After initial treatment, subjects rated pre-defined treatment site responses (redness, swelling, bruising, lump/bump formation, pain/tenderness, and itching) as predominantly mild or moderate in intensity (Table 1), typically with a duration of 1 to 2 weeks (Table 2). Based on data from 109 subjects, no increase in frequency or in intensity of signs/symptoms was observed following the retreatment injection or retreatment touch-up injection.

The trend in adverse events remained the same across subject skin types. Among the 73 subjects of Fitzpatrick Skin Types IV, V, and VI (18 of which were of Skin Type V or VI) in the study, no cases of keloid formation or of hyperpigmentation were reported.

Treatment site responses reported in subject diaries that lasted longer than 3 weeks were considered adverse events (AEs). AEs were also reported by the Treating Investigator at all follow-up visits where applicable.

Among the 170 treated subjects, 7.1% (12/170) experienced device- and injection-related AEs following initial and touch-up treatment, as well as retreatment and touch-up treatment. These subjects reported a total of 9 events related to control treatment and 10 events related to Restylane Refyne. The most common of treatment site responses was injection site erythema, which was reported for 4 subjects. Other treatment site responses (swelling, mass, hematoma, pruritus, and anesthesia) were reported for 1 subject each. Other related adverse events included presyncope (2 subjects), headache (1 subject), syncope (1 subject), and ecchymosis (1 subject).

Two subjects reported 2 serious adverse events (SAEs) that were considered to be unrelated to the device. The events were worsened knee osteoarthritis and a case of cholecystitis.

Treatment site responses after initial treatments are summarized by severity in Table 1 and by duration in Table 2.

**Table 1 - Treatment Site Responses by Maximum Severity Occurring In Subjects After Initial Treatment**

	Restylane Refyne (N=170) n (%)				Control (N=170) n (%)			
	Mild	Moderate	Severe	Total	Mild	Moderate	Severe	Total
<b>Post-Initial Injection<sup>a</sup> (N= 168 for Restylane Refyne and N= 168 for the control)</b>								
Redness	60 (35.7)	24 (14.3)	9 (5.4)	93 (55.4)	62 (36.9)	22 (13.1)	14 (8.3)	98 (58.3)
Swelling	66 (39.3)	30 (17.9)	5 (3.0)	101 (60.1)	52 (31.0)	44 (26.2)	6 (3.6)	102 (60.7)
Bruising	49 (29.2)	29 (17.3)	18 (10.7)	96 (57.1)	51 (30.4)	31 (18.5)	14 (8.3)	96 (57.1)
Lump/Bump Formation	39 (23.2)	26 (15.5)	10 (6.0)	75 (44.6)	45 (26.8)	27 (16.1)	11 (6.5)	83 (49.4)
Pain/Tenderness	58 (34.5)	11 (6.5)	3 (1.8)	72 (42.9)	65 (38.7)	19 (11.3)	2 (1.2)	86 (51.2)
Itching	21 (12.5)	3 (1.8)	1 (0.6)	25 (14.9)	28 (16.7)	1 (0.6)	0	29 (17.3)

Percentages are based on total number of subjects who reported local tolerability assessments in a subject diary.

<sup>a</sup> Number of subjects who completed subject diaries.

**Table 2 - Duration of Treatment Site Responses Occurring In Subjects After Initial Treatment**

Injection site response	Restylane Refyne (N=170) n (%)				Control (N=170) n (%)			
	1-3 Days	4-7 Days	8-14 Days	>14 Days	1-3 Days	4-7 Days	8-14 Days	>14 Days
<b>Post-Initial Injection<sup>b</sup> (N= 168 for Restylane Refyne and N= 168 for the control)</b>								
Redness	71 (42.3)	13 (7.7)	5 (3.0)	4 (2.4)	73 (43.5)	18 (10.7)	5 (3.0)	2 (1.2)
Swelling	58 (34.5)	23 (13.7)	14 (8.3)	6 (3.6)	55 (32.7)	24 (14.3)	17 (10.1)	6 (3.6)
Bruising	31 (18.5)	30 (17.9)	27 (16.1)	8 (4.8)	28 (16.7)	35 (20.8)	29 (17.3)	4 (2.4)
Lump/bump Formation	33 (19.6)	19 (11.3)	9 (5.4)	14 (8.3)	34 (20.2)	21 (12.5)	16 (9.5)	12 (7.1)
Pain/tenderness	53 (31.5)	11 (6.5)	8 (4.8)	0	63 (37.5)	19 (11.3)	4 (2.4)	0
Itching	22 (13.1)	2 (1.2)	1 (0.6)	0	26 (15.5)	3 (1.8)	0	0

Percentages are based on total number of subjects who reported local tolerability assessments in a subject diary.

<sup>a</sup> Number of days was defined as the sum of days when a sign/symptom was scored 'Mild' or higher.

<sup>b</sup> Number of subjects who completed subject diaries.

## **B. Other Safety Data**

### **Post-Market Surveillance**

The following post market adverse events have been reported for the Restylane Refyne products since release to markets outside the U.S. in 2011; atrophy/scarring, capillary disorders such as telangiectasia, dermatitis, discoloration, erythema, granuloma, hypersensitivity, infection, inflammation, mass, neurological symptoms such as hypoesthesia, pain/tenderness, papules/nodules, pruritus, reactivation of herpes infection, short duration of effect, swelling and urticaria.

Other potential adverse events that have been reported following injection of hyaluronic acid gels in general and may occur when using the product include the following: abscess, acne, angioedema, blisters, bruising, device dislocation, fistula, induration, ischemia/ necrosis, rash, and visual disturbance.

Vascular compromise may occur due to an inadvertent intravascular injection or as a result of vascular compression associated with implantation of any injectable product. This may manifest as ischemia or necrosis at the implant site or in the area supplied by the blood vessels affected; or rarely as ischemic events in other organs due to embolization.

Vision abnormalities including blindness have been reported following injection of dermal fillers including hyaluronic acid, with and without lidocaine, into the nose, glabella, periorbital areas, and/or cheek, with a time to onset ranging from immediate to a few days following injection. Reported treatments include anticoagulant, epinephrine, aspirin, hyaluronidase, corticosteroid treatment and hyperbaric oxygen. Outcomes ranged from resolved to ongoing at the time of last contact. Events requiring medical intervention, and events where resolution information is not available were reported after injection of hyaluronic acid with or without lidocaine.

There has been an isolated case report and the scientific literature also refers to rare events of cerebral infarction after treatment with dermal fillers (see Warnings section).

## **7. CLINICAL STUDIES**

### **A. Pivotal Study for Restylane Refyne**

#### **Pivotal Study Design**

A multi-center, double-blinded (subject and evaluator), randomized, active-controlled, clinical study with a split-face design was conducted to evaluate the safety and effectiveness of Restylane Refyne versus a comparator, a non-lidocaine HA dermal filler, in the treatment of moderate to severe nasolabial folds. Subjects were randomized to treatment with Restylane Refyne on either the right or left side of the face in a 1:1 ratio. The non-lidocaine containing comparator was injected into the other side of the face. Up to 2 initial treatments approximately 3 weeks apart (initial treatment and up to 1 touch-up treatment) and 48 weeks later up to 2 retreatments approximately 3 weeks apart (1 optional retreatment and up to 1 touch-up

treatment) were allowed.

Treated subjects returned for routine safety visits with the Treating Investigator at 3, 12, 24, 36, and 48 weeks after the initial injection(s). All subjects returned for effectiveness follow-up visits with the evaluating investigators at 3, 12, 24, 36, and 48 weeks after the initial injection(s). The evaluating investigator assessed subjects' nasolabial folds on the validated 5-point Wrinkle Severity Rating Scale (WSRS). The subjects self-assessed the wrinkle severity on a 5-point scale and also used an 11-point Numeric Pain Intensity Scale (NPIS).

### **Study Endpoints**

The primary effectiveness variable was the change in WSRS from Baseline to 24 weeks after treatment as assessed by the Blinded Evaluating Investigator compared to the control.

Secondary effectiveness endpoints included the difference in WSRS change from baseline to each visit up to Week 48 after treatment, WSRS response rate, defined as the percentage of subjects with at least a 1-grade improvement in WSRS from Baseline up to Week 48 after treatment, pain assessment after each injection (compared between treatments), the difference in subject self-assessment of wrinkle severity (SSA) response rate at weeks 3, 12, 24, 36, and 48 after treatment, and the change from baseline in SSA score at weeks 3, 12, 24, 36, and 48 after treatment.

### **Subject Demographics**

A total of 171 subjects were randomized per protocol, 1 of whom discontinued prior to treatment. Of the remaining 170 subjects, 21 subjects prematurely discontinued the study, primarily due to subject request (67%, 14/21) or due to loss to follow-up (19%, 4/21).

At baseline, all subjects had moderate (55%, 93/170) or severe (45%, 77/170) WSRS scores for their nasolabial folds. The majority of subjects self-assessed their wrinkle severity as either moderate (45%) or severe (45%). Subject demographics and pre-treatment characteristics are presented in Table 3.

**Table 3 - Demographics and Pre-treatment Characteristics (N= 170) - All Subjects**

Characteristic		(N = 170) % (n)
Gender	Female	94% (160)
	Male	6% (10)
Age (years)	Median	54.5
	Range (min, max)	(26-77)
Race	Caucasian	68% (116)
	Hispanic	22% (38)
	Black	9% (15)
	Other	1% (1)
Fitzpatrick Skin Type	I	4% (6)
	II	23% (39)
	III	31% (52)
	IV	33% (55)
	V	5% (9)
	VI	5% (9)

**Primary Effectiveness Results**

The primary endpoint of the study was met. The mean change from baseline to month 6 on the Wrinkle Severity Rating Scale (WSRS) was 1.1 for subjects treated with Restylane Refyne and 1.2 for subjects treated with the control. The effect of Restylane Refyne was demonstrated to be non-inferior to the control, with both products showing a clinically meaningful improvement in wrinkle severity. For the primary effectiveness variable of change from Baseline in WSRS at Week 24 post-treatment, both study products caused a mean reduction of similar magnitude. The two products' point estimates differed by -0.07 units (confidence interval -0.15 to 0.01). In addition, similar numbers of subjects experienced a 1-grade, 2-grade, or 3-grade improvement with both study products.

Throughout the follow-up period, Restylane Refyne continued to provide a clinically significant improvement in wrinkle severity ( $\geq 1$ -point mean improvement on the WSRS), with a majority of folds treated with Restylane Refyne demonstrating improvement through 1 year (Table 4).

At 6 months, improvements in nasolabial folds ( $\geq 1$ -point mean improvement on the WSRS) treated with Restylane Refyne were observed in 78.8% (134/170) of subjects. At 1 year, 62.3% (101/162) of folds treated with Restylane Refyne maintained improvement.

On Subject Self-Assessment at 6 months, 78.8% (134/170) of subjects reported improvement in fold severity for the folds treated with Restylane Refyne. At 1 year, 66.7% (108/162) of subjects reported improvement in folds treated with Restylane Refyne.

**Table 4 – Effectiveness Results through 1 Year**

	<b>Restylane Refyne % (n/N ITT)</b>
Week 12	90.6 (154/170)
Week 24	78.8% (134/170)
Week 36	78.0% (128/164)
Week 48	62.3% (101/162)

Restylane Refyne presented a statistically ( $P = <0.001$ ) more favorable pain profile than the non-lidocaine containing control. At the time of injection, subjects rated their pain as 2.9 on a scale of 0 (no pain) to 10 (worst possible pain) for the side of the face treated with Restylane Refyne. In comparison, subjects rated their pain as 5.6 on the same scale for the side of the face treated with the control. At the time of the initial injection until the 60-minute time point, subjects recorded more pain with the comparator than with Restylane Refyne.

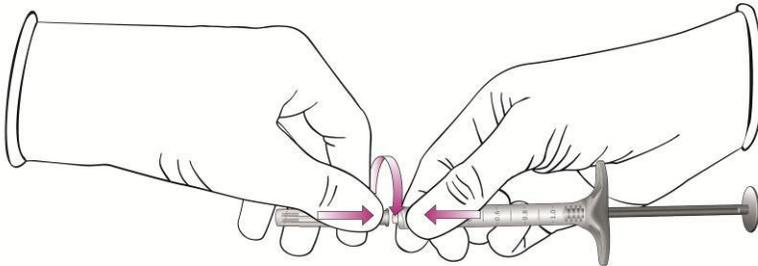
**Subject Self-Assessments**

Subjects performed self-assessments of wrinkle severity. Most subjects (78.8% at Week 24 and 66.7% at Week 48) had at least a 1-grade improvement in SSA scores with Restylane Refyne.

## 8. INSTRUCTIONS FOR USE

### A. To Attach Needle to Syringe

Use the thumb and forefinger to hold firmly around the syringe barrel. Grasp the needle shield with the other hand. To facilitate proper assembly, both push and rotate firmly.



### B. Health Care Professional Instructions

1. Restylane Refyne is a cross-linked formulation resulting in a soft injectable gel that can be injected using a 30 G needle, for contouring and volumizing of facial wrinkles and folds.
2. Prior to treatment, the patient's medical history should be obtained, and the patient should be fully apprised of the indications, contraindications, warnings, precautions, treatment responses, adverse reactions, and method of administration. Patients also should be advised that supplemental "touch-up" implantations may be required to achieve and maintain maximum correction. Pre-treatment photographs are recommended.
3. Although the study showed that lidocaine in Restylane Refyne had an effect on pain, supplementary anesthesia may be used for additional pain management during and after injection.
4. After ensuring that the patient has thoroughly washed the treatment area with soap and water, the area should be prepped with alcohol or other antiseptic.
5. To avoid breakage of the needle, do not attempt to bend or otherwise manipulate it before or during treatment.
6. Before injection press the plunger rod carefully until a small droplet is visible at the tip of the needle.
7. If the needle is blocked, do not increase the pressure on the plunger rod. Instead, stop the injection and replace the needle.
8. After insertion of the needle, and just before injection, the plunger rod should be withdrawn slightly to aspirate and verify the needle is not in a blood vessel

9. After the first small amount of material has been injected into the patient, wait a few seconds to allow the lidocaine to take effect before proceeding with the rest of the injection.
10. The injection technique, the depth of injection and volume administered may vary based on the subject's treatment needs. A retrograde linear threading technique, serial puncture injections, or a combination of the 2 have been used to achieve optimal results. Injecting the product too superficially may result in visible lumps and/or bluish discoloration.
11. Inject Restylane Refyne by applying even pressure on the plunger rod while slowly pulling the needle backward. It is important that the injection be stopped just before the needle is pulled out of the skin to prevent material from leaking out or ending up too superficially in the skin
12. Injection volume to achieve optimal correction of moderate to severe nasolabial folds is generally about 1.5 mL per treatment site. Injection volume to achieve optimal correction for retreatment is generally about 1.0 mL per treatment site.
13. Correct to 100% of the desired volume effect. Do not overcorrect.
14. If immediate blanching occurs, the injection should be stopped and the area massaged until it returns to a normal color. Blanching may represent a vessel occlusion. If normal skin coloring does not return, do not continue with the injection. Treat in accordance with American Society for Dermatologic Surgery guidelines, which include hyaluronidase injection.<sup>1</sup>
15. When injection is completed, the treated site may be gently massaged to mold the product to the contour of the surrounding tissue and assure that it is evenly distributed. If overcorrection occurs, massage the area between your fingers or against an underlying superficial bone to obtain optimal results.
16. With patients who have localized swelling, the degree of correction is sometimes difficult to judge at the time of treatment. In these cases, it is better to invite the patient back to the office for a touch-up treatment.
17. Patients may experience treatment site responses, which typically resolve within 1 to 2 weeks. An ice pack may be applied for a short period following treatment to minimize swelling and reduce pain.
18. The health care practitioner should instruct the patient to promptly report any problems associated with the use of Restylane Refyne.

## **C. Patient Instructions**

It is recommended that the following information be shared with patients:

- Within the first 24 hours, patients should avoid strenuous exercise and extensive sun or heat exposure. Exposure to any of the above may cause temporary redness, swelling, and/or itching at the treatment sites
- If the treated area is swollen, an ice pack may be applied to the site for a short period
- To report an adverse reaction, phone Galderma Laboratories, L.P, 1-855-425-8722.

## **9. HOW SUPPLIED**

Restylane Refyne injectable gel is supplied in individual treatment syringes with needles as indicated on the carton. The volume in each syringe is as stated on the syringe label and on the carton. The contents of the syringe are sterile. Do not resterilize. Do not use if package is open or damaged.

## **10. SHELF LIFE AND STORAGE**

Restylane Refyne must be used prior to the expiration date on the package. Store at a temperature of up to 25°C/77°F. Do not freeze. Protect from sunlight. Refrigeration is not required.

Restylane Refyne injectable gel has a clear appearance. In the event that a syringe contains material that is not clear, do not use the syringe; notify Galderma Laboratories, L.P. immediately at 1-855-425-8722.

---

<sup>1</sup> Alam, M, Gladstone H, Kramer EM, et al. ASDS guidelines of care: injectable fillers *Dermatol Surg.* 2008;34(suppl 1):S115-S148.

To place an order, contact Galderma Laboratories, L.P. at 1-855-425-8722

Rx only

**U.S. Patent 8,357,795; 8,450,475; 8,822,676**

**Manufactured for**

Galderma Laboratories, L.P.

14501 North Freeway

Fort Worth, TX 76177

U.S.A

Phone: 1-855-425-8722

**Manufactured by:**

Q-Med AB

Seminariegatan 21

SE-752 28 Uppsala

Sweden

*Restylane* and *Galderma* are trademarks of Nestlé Skin Health S.A.

All other trademarks are the property of their respective owners.

**Revised:** December 2016

**Part Number:** 90-18814-01