

# JUVÉDERM® VOLUMA™ XC

**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

JUVÉDERM® VOLUMA™ XC is a sterile, biodegradable, non-pyrogenic, viscoelastic, clear, colorless, homogeneous gel implant. It consists of hyaluronic acid (HA) produced by *Streptococcus* species of bacteria, which is crosslinked with BDDE. It is formulated to a concentration of 20 mg/mL and 0.3% w/w lidocaine in a physiologic buffer.

## 2. INTENDED USE/INDICATIONS

JUVÉDERM® VOLUMA™ XC is indicated for deep (subcutaneous and/or supraperiosteal) injection for cheek augmentation to correct age-related volume deficit in the mid-face and for augmentation of the chin region to improve the chin profile in adults over the age of 21.

## 3. CONTRAINDICATIONS

- JUVÉDERM® VOLUMA™ XC is contraindicated for patients with severe allergies manifested by a history of anaphylaxis or history or presence of multiple severe allergies.
- JUVÉDERM® VOLUMA™ XC contains trace amounts of Gram-positive bacterial proteins and is contraindicated for patients with a history of allergies to such material.
- JUVÉDERM® VOLUMA™ XC contains lidocaine and is contraindicated for patients with a history of allergies to such material.

## 4. WARNINGS

- The product must not be injected into blood vessels. Introduction of JUVÉDERM® VOLUMA™ XC into the vasculature may lead to embolization, occlusion of the vessels, ischemia, or infarction. Take extra care when injecting soft tissue fillers; for example, after insertion of the needle, and just before injection, the plunger rod can be withdrawn slightly to aspirate and verify the needle is not intravascular, inject the product slowly and apply the least amount of pressure necessary.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 (see Health Care Professional Instructions #17).
- Product use at specific sites in which an active inflammatory process (skin eruptions such as cysts, pimples, rashes, or hives) or infection is present should be deferred until the underlying process has been controlled.
- Treatment site reactions consist mainly of short-term inflammatory symptoms and generally resolve within 2 to 4 weeks. Refer to the ADVERSE EVENTS section for details.

## 5. PRECAUTIONS

- JUVÉDERM® VOLUMA™ XC is packaged for single-patient use. Do not resterilize. Do not use if package is open or damaged.

- 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 professionals 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.
- Based on preclinical studies and a toxicological risk assessment, patients should be limited to 20 mL of any JUVÉDERM® injectable gel per 60 kg (130 lbs) body mass per year. The safety of injecting greater amounts has not been established.
- The safety and effectiveness for the treatment of anatomic regions other than the mid-face, chin, and pre-jowl sulcus regions 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.
- JUVÉDERM® VOLUMA™ XC 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, and in patients with very thin skin in the mid-face region has not been established.
- The safety has been established for use in patients between 35 and 65 years of age for cheek augmentation and patients between 22 and 80 years of age for chin augmentation.
- The safety in patients with known susceptibility to keloid formation, hypertrophic scarring, and pigmentation disorders has not been studied.
- JUVÉDERM® VOLUMA™ XC should be used with caution in patients on immunosuppressive therapy.
- 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.
- Patients who experience skin injury near the site of JUVÉDERM® VOLUMA™ XC implantation may be at a higher risk for adverse events.
- Patients may experience late onset nodules with use of dermal fillers, including JUVÉDERM® VOLUMA™ XC. Refer to ADVERSE EVENTS section for details.
- The safety and effectiveness of cannula injection of JUVÉDERM® VOLUMA™ XC has only been clinically evaluated with the TSK STERIGLIDE™ 25-G, 1½" cannula.
- The safety of JUVÉDERM® VOLUMA™ XC with cannula for cheek augmentation has not been established in patients with Fitzpatrick Skin Types V and VI.
- 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.
- JUVÉDERM® VOLUMA™ XC injectable gel is a clear, colorless gel without visible particulates. In the event that the content of a syringe shows signs of separation and/or appears cloudy, do not use the syringe; notify Allergan Product Surveillance at (877) 345-5372.
- JUVÉDERM® VOLUMA™ XC should only be used by health care professionals who have appropriate experience and who are knowledgeable about the anatomy and the product for use in deep (subcutaneous and/or supraperiosteal) injection for cheek and chin augmentation.
- Failure to comply with the needle attachment instructions could result in needle disengagement and/or product leakage at the LUER-LOK® and needle hub connection.

- Skin laxity of the chin, neck, or jaw could obscure the effects of JUVÉDERM® VOLUMA™ XC treatment in the chin region. Therefore, in the chin study, the device was not evaluated in subjects with significant skin laxity of the chin, neck, or jaw.
- The effect of JUVÉDERM® VOLUMA™ XC injection into the chin on facial hair growth has not been studied.

## 6. ADVERSE EVENTS

### A. Clinical Evaluation of JUVÉDERM® VOLUMA™ XC for Cheek Augmentation

In the randomized, controlled clinical trial to evaluate the safety and effectiveness of JUVÉDERM® VOLUMA™ XC, there were 238 subjects treated with JUVÉDERM® VOLUMA™ XC in the mid-face (zygomatocmalar region, anteromedial cheek, and/or submalar region, see Figure 1) during the primary phase of the study. Touch-up treatments occurred approximately 30 days after initial injection. After the 6-month blinded “no treatment” control period, control subjects were allowed to receive treatment; 32 control subjects were treated in the study. Preprinted diary forms were used by subjects after treatment to record specific signs and symptoms experienced during each of the first 30 days after initial, touch-up, and repeat treatments in each region of the mid-face. Of the 270 subjects who underwent treatment (from both the treatment and control groups), 265 completed the diary forms. A subset of subjects also underwent repeat treatment following completion of the extended follow-up phase of the study, with 162 subjects completing diary forms after repeat treatment. Subjects were instructed to rate each treatment site response listed on the diary as “Mild (barely noticeable),” “Moderate (uncomfortable),” “Severe (severe discomfort),” or “None.”

After initial treatment with JUVÉDERM® VOLUMA™ XC, 98% of subjects reported experiencing a local treatment site response. Subjects rated treatment site responses as predominantly mild (21.5%) or moderate (59.2%) in severity with a duration of 2 to 4 weeks. For those treatment site responses evaluated as moderate or severe, the median duration as moderate or severe was 2 days, and the median time to complete resolution was 6 days. Based on data from 167 subjects who received repeat treatment, treatment site responses following repeat treatment were less severe, with reduced incidence and duration compared to initial treatment.

Treatment site responses reported by > 5% of subjects 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 > 5% of Subjects After Initial Treatment for Cheek Augmentation (N = 265)**

Treatment Site Response	Severity <sup>a</sup>			
	Total % (n/N <sup>b</sup> )	Mild % (n/N)	Moderate % (n/N)	Severe % (n/N)
Any Treatment Site Response	98.1% (260/265)	21.5% (56/260)	59.2% (154/260)	19.2% (50/260)
Tenderness	92.1% (244/265)	46.3% (113/244)	50.0% (122/244)	3.7% (9/244)
Swelling	85.7% (227/265)	46.7% (106/227)	43.6% (99/227)	9.7% (22/227)
Firmness	82.3% (218/265)	37.6% (82/218)	54.6% (119/218)	7.8% (17/218)
Lumps/Bumps	81.1% (215/265)	41.4% (89/215)	48.8% (105/215)	9.8% (21/215)
Bruising	77.7% (206/265)	37.4% (77/206)	51.5% (106/206)	11.2% (23/206)
Pain	66.4% (176/265)	59.1% (104/176)	38.6% (69/176)	2.3% (4/176)
Redness	66.0% (175/265)	60.0% (105/175)	36.0% (63/175)	4.0% (7/175)
Discoloration	41.1% (109/265)	62.4% (69/109)	27.5% (30/109)	10.1% (11/109)
Itching	38.5% (102/265)	70.6% (72/102)	18.6% (19/102)	10.8% (11/102)

<sup>a</sup> Maximum severity reported in the diary. The denominator for percentages by severity is the number of subjects with the corresponding treatment site response.

<sup>b</sup> N denotes number of subjects who recorded responses in the diaries after the initial treatment.

Treatment site responses reported by ≤ 5% of subjects included ache, acne, bulge, bumps, cheek larger upon waking up, dry patch, fine wrinkles, injection/needle marks, numbness, pigmentation from treatment, puffiness, rash, scratch near injection point, soreness, tightness, and yellowness.

**Table 2. Duration of Treatment Site Responses After Initial Treatment for Cheek Augmentation**

Treatment Site Response	Total % (n/N <sup>a</sup> )	Duration <sup>b</sup>				
		1-3 Days % (n/N)	4-7 Days % (n/N)	8-14 Days % (n/N)	15-30 Days % (n/N)	> 30 Days % (n/N)
Any Treatment Site Response	98.1% (260/265)	8.1% (21/260)	22.7% (59/260)	24.6% (64/260)	24.6% (64/260)	20.0% (52/260)
Tenderness	92.1% (244/265)	29.9% (73/244)	30.7% (75/244)	27.9% (68/244)	8.6% (21/244)	2.9% (7/244)
Swelling	85.7% (227/265)	41.0% (93/227)	33.0% (75/227)	17.6% (40/227)	5.3% (12/227)	3.1% (7/227)
Firmness	82.3% (218/265)	26.6% (58/218)	29.8% (65/218)	20.2% (44/218)	11.0% (24/218)	12.4% (27/218)
Lumps/Bumps	81.1% (215/265)	21.4% (46/215)	22.3% (48/215)	22.3% (48/215)	18.1% (39/215)	15.8% (34/215)
Bruising	77.7% (206/265)	24.8% (51/206)	30.6% (63/206)	29.6% (61/206)	14.6% (30/206)	0.5% (1/206)
Pain	66.4% (176/265)	56.3% (99/176)	31.3% (55/176)	9.7% (17/176)	2.8% (5/176)	0% (0/176)
Redness	66.0% (175/265)	59.4% (104/175)	28.0% (49/175)	8.6% (15/175)	2.3% (4/175)	1.7% (3/175)

Among the 270 treated subjects, 32.6% device/injection-related AEs following in 99% (624/627) of which were reported in treatment site AEs were evenly divided in regions. Fewer AEs occurred after repeat touch-up treatment.

**Table 3. Device/Injection-Related Occurring in > 1% of Treated Subjects (N = 270)**

Adverse Event
Treatment site mass
Treatment site induration
Treatment site swelling
Treatment site pain
Treatment site hematoma
Treatment site discoloration
Treatment site erythema
Treatment site reaction

Device/injection-related adverse events subjects included injection site hypertrophy/inflammation (0.4%), injection site anasthydryness (0.4%), injection site erosion (0.4%) and syncope (0.4%).

Two subjects (0.7%; 2/270) reported 3 sites that were considered to be related to the 6 months after treatment, after being scro area by a tree branch, one subject experienced under the left eye. The subject also experienced right cheek approximately 7 months after subject experienced lumps in the cheek after treatment. A couple of days before experienced myofascial pain and body included topical steroids, oral antibiotics, inflammatory medication, and hyaluronic

### B. 1-Year Post-Approval Study of JUVÉDERM® VOLUMA™ XC for Cheek Augmentation

The post-approval study was a retrospective study collected in the JUVÉDERM® VOLUMA™ XC data were analyzed from subjects who received treatment with JUVÉDERM® VOLUMA™ XC study. Pre-printed diary forms were used to record specific signs and symptoms experienced 30 days after repeat treatment.

Treatment site responses reported by subjects after repeat treatment are summarized by severity in Table 5. The incidence of treatment site responses was lower than the incidence of treatment site responses after repeat treatment, and shorter in duration after repeat touch-up treatment. The majority of treatment site responses resolved within 2 weeks after initial touch-up treatment.

**Table 6. Device/Injection-Related AEs After Repeat Treatment Occurring in > 1% of Treated Subjects for Cheek Augmentation (N = 167)**

Adverse Event	Treated Subjects % (n/N)
Injection Site Mass	4.2% (7/167)
Injection Site Induration	4.2% (7/167)
Injection Site Bruising	1.2% (2/167)

All device/injection-related AEs after repeat treatment were mild to moderate, required no action, and resolved without sequelae. Generally, device/injection-related AEs were less severe after repeat treatment compared to initial/touch-up treatment, and most resolved within 3 months. Similar to the initial/touch-up treatment, 3 subjects experienced a device/injection-related AE that lasted more than 180 days, but all resolved without requiring any treatment. Device/injection-related adverse events occurring in ≤ 1% of subjects included injection site swelling (0.6%), injection site pain (0.6%), and injection site papule (0.6%).

Of the 121 subjects who completed the 12 months of follow-up after repeat treatment, none experienced any late onset device/injection-related AEs (those occurring more than 1 month after repeat treatment). There were no device/injection-related serious adverse events after repeat treatment.

### C. Other Safety Data – JUVÉDERM® VOLUMA™ XC Cannula Study for Cheek Augmentation

In the randomized, within-subject, controlled clinical trial to evaluate the safety and effectiveness of JUVÉDERM® VOLUMA™ XC using cannula in subjects seeking correction of age-related mid-face volume deficit, 60 subjects received treatment using a TSK STERIGLIDE™ 25-G, 1½" cannula in one cheek and a needle in the other cheek. To achieve optimal correction, the use of a needle was also permitted in the zygomaticomalar region in the cheek randomized to cannula. Preprinted diary forms were used by subjects after treatment to record specific signs and symptoms experienced during each of the first 30 days after treatment. Of the 60 subjects who underwent treatment, 60 completed the diary forms. Subjects were instructed to rate each treatment site response listed on the diary as "Mild (barely noticeable)," "Moderate (uncomfortable)," "Severe (severe discomfort)," or "None."

After treatment with JUVÉDERM® VOLUMA™ XC, all subjects reported experiencing a local treatment site response. Subjects rated treatment site responses as being mostly mild or moderate in severity (91.7%), with 60% of subjects having responses resolved within 2 weeks.

Treatment site responses reported by > 5% of subjects after initial treatments are summarized by severity in Table 7 and by duration in Table 8.

AEs were also reported by the Treating Investigator at all follow-up visits, when applicable. Among the 60 mITT subjects, 2 subjects experienced 3 treatment-related AEs (injection site mass on the needle cheek in one subject and injection site plaque on both the needle and cannula cheeks in another subject).

**Table 7. Severity of ISRs Occurring in > 5% of Subjects (Safety Population)**

Treatment Site Response	Cannula Severity*				Needle Severity*			
	Total % (n/N) <sup>b</sup>	Mild % (n/N) <sup>b</sup>	Moderate % (n/N) <sup>b</sup>	Severe % (n/N) <sup>b</sup>	Total % (n/N) <sup>b</sup>	Mild % (n/N) <sup>b</sup>	Moderate % (n/N) <sup>b</sup>	Severe % (n/N) <sup>b</sup>
Any Treatment Site Response	100.0% (60/60)	50.0% (30/60)	41.7% (25/60)	8.3% (5/60)	100.0% (60/60)	43.3% (26/60)	45.0% (27/60)	11.7% (7/60)
Tenderness to touch	91.7% (55/60)	60.0% (36/60)	28.3% (17/60)	3.3% (2/60)	96.7% (58/60)	53.3% (32/60)	38.3% (23/60)	5.0% (3/60)
Firmness	83.3% (50/60)	53.3% (32/60)	28.3% (17/60)	1.7% (1/60)	90.0% (54/60)	53.3% (32/60)	31.7% (19/60)	5.0% (3/60)
Swelling	81.7% (49/60)	60.0% (36/60)	20.0% (12/60)	1.7% (1/60)	85.0% (51/60)	55.0% (33/60)	28.3% (17/60)	1.7% (1/60)
Lumps/Bumps	70.0% (42/60)	51.7% (31/60)	16.7% (10/60)	1.7% (1/60)	83.3% (50/60)	56.7% (34/60)	25.0% (15/60)	1.7% (1/60)
Pain after injection	66.7% (40/60)	45.0% (27/60)	18.3% (11/60)	3.3% (2/60)	83.3% (50/60)	56.7% (34/60)	26.7% (16/60)	0% (0/60)
Bruising	60.0% (36/60)	40.0% (24/60)	16.7% (10/60)	3.3% (2/60)	71.7% (43/60)	41.7% (25/60)	30.0% (18/60)	0% (0/60)
Redness	55.0% (33/60)	46.7% (28/60)	8.3% (5/60)	0% (0/60)	61.7% (37/60)	45.0% (27/60)	16.7% (10/60)	0% (0/60)
Discoloration	36.7% (22/60)	28.3% (17/60)	8.3% (5/60)	0% (0/60)	43.3% (26/60)	28.3% (17/60)	15.0% (9/60)	0% (0/60)
Itching	18.3% (11/60)	16.7% (10/60)	1.7% (1/60)	0% (0/60)	20.0% (12/60)	20.0% (12/60)	0% (0/60)	0% (0/60)

\* Maximum reported severity in the diary.

<sup>b</sup> Denominator for percentages is the number of subjects who recorded in the diaries after the treatment.

**Table 8. Total Duration of ISRs (Safety Population)**

Treatment Site Response	Cannula Duration*					Needle Duration*				
	Total % (n/N) <sup>b</sup>	1-3 Days % (n/N) <sup>b</sup>	4-7 Days % (n/N) <sup>b</sup>	8-14 Days % (n/N) <sup>b</sup>	15-30 Days % (n/N) <sup>b</sup>	Total % (n/N) <sup>b</sup>	1-3 Days % (n/N) <sup>b</sup>	4-7 Days % (n/N) <sup>b</sup>	8-14 Days % (n/N) <sup>b</sup>	15-30 Days % (n/N) <sup>b</sup>
Any Treatment Site Response	100.0% (60/60)	16.7% (10/60)	21.7% (13/60)	21.7% (13/60)	40.0% (24/60)	100.0% (60/60)	8.3% (5/60)	25.0% (15/60)	25.0% (15/60)	41.7% (25/60)
Tenderness to touch	91.7% (55/60)	25.0% (15/60)	26.7% (16/60)	23.3% (14/60)	16.7% (10/60)	96.7% (58/60)	23.3% (14/60)	31.7% (19/60)	26.7% (16/60)	15.0% (9/60)
Firmness	83.3% (50/60)	25.0% (15/60)	21.7% (13/60)	6.7% (4/60)	11.7% (7/60)	90.0% (54/60)	26.7% (16/60)	26.7% (16/60)	21.7% (13/60)	15.0% (9/60)
Swelling	81.7% (49/60)	33.3% (20/60)	30.0% (18/60)	4.0% (2/60)	6.7% (4/60)	85.0% (51/60)	28.3% (17/60)	35.0% (21/60)	15.0% (9/60)	6.7% (4/60)
Lumps/Bumps	70.0% (42/60)	20.0% (12/60)	13.3% (8/60)	16.7% (10/60)	20.0% (12/60)	83.3% (50/60)	23.3% (14/60)	23.3% (14/60)	20.0% (12/60)	16.7% (10/60)
Pain after injection	66.7% (40/60)	53.3% (32/60)	5.0% (3/60)	5.0% (3/60)	3.3% (2/60)	83.3% (50/60)	53.3% (32/60)	16.7% (10/60)	11.7% (7/60)	1.7% (1/60)
Bruising	60.0% (36/60)	20.0% (12/60)	18.3% (11/60)	16.7% (10/60)	5.0% (3/60)	71.7% (43/60)	20.0% (12/60)	18.3% (11/60)	20.0% (12/60)	13.3% (8/60)
Redness	55.0% (33/60)	36.7% (22/60)	13.3% (8/60)	8.3% (5/60)	0% (0/60)	61.7% (37/60)	41.7% (25/60)	16.7% (10/60)	3.3% (2/60)	0% (0/60)
Discoloration	36.7% (22/60)	11.7% (7/60)	11.7% (7/60)	8.3% (5/60)	5.0% (3/60)	43.3% (26/60)	11.7% (7/60)	13.3% (8/60)	11.7% (7/60)	6.7% (4/60)
Itching	18.3% (11/60)	13.3% (8/60)	0% (0/60)	5.0% (3/60)	0% (0/60)	20.0% (12/60)	10.0% (6/60)	5.0% (3/60)	3.3% (2/60)	1.7% (1/60)

\* Maximum severity reported in the diary. The denominator is the number of subjects with the corresponding treatment site response.

<sup>b</sup> N denotes number of subjects who recorded responses in the diary.

initial, touch-up, and repeat treatments. 181 subjects completed the diary forms received repeat treatment, 73 completed were instructed to rate each treatment site diary as "Mild (easily tolerated)," "Moderate (uncomfortable)," or "Severe (unable to do daily activity)," or "Severe (unable to do daily activity)." After initial treatment with JUVÉDERM® VOLUMA™ XC, all subjects reported experiencing a local treatment site response. Subjects rated TSFs as predominantly mild or moderate in severity (91.7%), with 64.7%, 108/167) resolving within 2 weeks and duration of TSRs following repeat treatment following initial treatment.

TSRs reported by > 5% of subjects after repeat treatments are summarized by severity in Table 9 and by duration in Table 8.

**Table 9. Treatment Site Responses Occurring in > 5% of Subjects After Augmentation (N = 167)**

Treatment Site Response	Total % (n/N) <sup>b</sup>	Severity % (n/N) <sup>b</sup>	
		Total % (n/N) <sup>b</sup>	Mild % (n/N) <sup>b</sup>
Any Treatment Site Response	92.3% (167/181)	81.8% (148/181)	44.9% (75/167)
Tenderness	81.8% (148/181)	75.1% (136/181)	56.8% (84/148)
Firmness	75.1% (136/181)	68.5% (124/181)	58.8% (80/136)
Swelling	63.0% (114/181)	63.0% (114/181)	64.5% (80/124)
Pain	60.2% (109/181)	60.2% (109/181)	67.9% (74/109)
Lumps/Bumps	59.1% (107/181)	59.1% (107/181)	59.8% (64/107)
Bruising	48.6% (88/181)	48.6% (88/181)	69.3% (61/88)
Redness	27.6% (50/181)	27.6% (50/181)	86.0% (43/50)
Discoloration	14.9% (27/181)	14.9% (27/181)	74.1% (20/27)

\* Maximum severity reported in the diary. The denominator is the number of subjects with the corresponding treatment site response.

<sup>b</sup> N denotes number of subjects who recorded responses in the diary.

Fifty percent (7/14) of the participants who experienced treatment-related TEAEs resolved within 1 week. For initial/touch-up treatment, 3 participants (1.6%) had 4 treatment-related TEAEs that lasted longer than 30 days, including injection site inflammation that lasted 153 days and injection site cellulitis that lasted 36 days, injection site erythema that lasted 264 days, and acne cyst that lasted 134 days.

Fewer AEs occurred after repeat treatment than after initial/touch-up treatment (Table 12). Among the 74 subjects who received repeat treatment, 8 treated participants (10.8%; 8/74) had 12 TEAEs, and 3 treated participants (4.1%; 3/74) had 7 treatment-related TEAEs. The most common TEAE occurring after repeat treatment was injection site mass (2.7%; 2/74). For repeat treatment, 4.1% of participants had mild TEAEs, 1.4% had moderate TEAEs, and 0% had severe TEAEs (Table 13). All TEAEs after repeat treatment did not require any intervention and most resolved within 30 days without sequelae. After repeat treatment, 1 participant (1.4%) had 1 treatment-related TEAE that lasted longer than 30 days: injection site mass that lasted 42 days. There were no serious TEAEs after repeat treatment.

**Table 12. Summary of TEAEs After Repeat Treatment (Safety Population)**

	Initial Treatment*		Repeat Treatment	
	Participants (N = 74) Number (%)	Events (N = 26)	Participants (N = 74) Number (%)	Events (N = 12)
All TEAEs	21 (28.4%)	26	8 (10.8%)	12
Treatment-related TEAEs	12 (16.2%)	14	3 (4.1%)	7
At injection site	10 (13.5%)	11	2 (2.7%)	5
Not at injection site	2 (2.7%)	3	1 (1.4%)	2
All SAEs	2 (2.7%)	2	0	0
Treatment-related SAEs	0	0	0	0
Discontinued due to TEAE	0	0	0	0
Deaths	0	0	0	0

\* AEs with onset within 30 days of initial treatment are included for participants who received repeat treatment to compare the AE rate within the same subset of subjects.

For both initial/touch-up treatments and repeat treatment, most treatment-related TEAEs began within 7 days of treatment. For initial/touch-up treatment, 1 participant had 3 treatment-related TEAEs that began > 30 days after treatment: injection site edema that began 173 days, 248 days, and 252 days after treatment. These were resolved within 3 days with medication.

There were no treatment-related TEAEs that began > 30 days after repeat treatment. All treatment-related TEAEs resolved without sequelae during the study period (12 months of follow-up after initial treatment or 1 month of follow-up after repeat treatment, if applicable). For initial/touch-up treatment, 4 participants had 5 treatment-related TEAEs that required treatment with medication or procedure.

**Table 13. Summary of Treatment-Related TEAEs for All Treated Participants (Safety Population)**

	Number (%)			
	Initial and Touch-up Participants (N = 182)	Treatment Events (N = 20)	Repeat Treatment (N = 74)	
			Participants (N = 74)	Events (N = 7)
<b>Overall Duration</b>				
≤ 7 days	14 (7.7%)	20	3 (4.1%)	7
8-14 days	7 (3.8%)	11	1 (1.4%)	2
15-30 days	2 (1.1%)	3	0	0
> 30 days	2 (1.1%)	2	1 (1.4%)	4
Not yet resolved	3 (1.6%)	4	1 (1.4%)	1
0	0	0	0	0
<b>Time to Onset On/After Treatment</b>				
≤ 7 days	12 (6.6%)	15	3 (4.1%)	7
8-14 days	1 (0.5%)	2	0	0
15-30 days	0	0	0	0
> 30 days	1 (0.5%)	3	0	0
<b>Severity</b>				
Mild	5 (2.7%)	6	3 (4.1%)	6
Moderate	8 (4.4%)	11	1 (1.4%)	1
Severe	2 (1.1%)	3	0	0
<b>Outcome</b>				
Recovered/Resolved	14 (7.7%)	20	3 (4.1%)	7
<b>Treatment Required</b>				
No	12 (6.6%)	15	3 (4.1%)	7
Medication	4 (2.2%)	5	0	0
Procedure	1 (0.5%)	1	0	0

Only needle treatment was allowed in the pogonion whereas all participants in the cannula treatment subgroup had some treatment with the needle. Results (Table 14) showed lower incidence of TSRs for injections with cannula than without cannula after each treatment (initial, touch-up, and repeat).

**Table 14. Incidence of TSRs After Initial Treatment With and Without Cannula (Safety Population)**

TSR	All Treated With Cannula (N = 44) n (%) <sup>a</sup>	All Treated Without Cannula (N = 137) n (%) <sup>b</sup>
Any TSR	34 (77.3%)	133 (97.1%)
Tenderness to touch	30 (68.2%)	118 (86.1%)
Firmness	28 (63.6%)	108 (78.8%)
Swelling	24 (54.5%)	100 (73.0%)
Bruising	24 (54.5%)	83 (60.6%)
Pain after injection	23 (52.3%)	91 (66.4%)
Lumps/Bumps	21 (47.7%)	88 (64.2%)
Redness	16 (36.4%)	72 (52.6%)

**Table 15. Comparison of Rate of Treatment-Related TEAEs in Participants Treated With Initial/Touch-up Treatment Versus Repeat Treatment**

Treatment	AEs in Participants Treated With Cannula and No Repeat Treatment (n/N)	AEs in Participants Treated With Cannula and No Repeat Treatment (n/N)
Initial/touch-up treatment	4.3% (2/46)	0 (0/18)
Repeat treatment		

A total of 11 subjects experienced 14 serious treatment-related TEAEs (SAEs) with onset after the study treatment. One subject (0.5%; 1/182) reported inflammation and injection site cellulitis, which was related to the device (Table 16). These events occurred after touch-up treatment and were treated with antibiotics, steroid, analgesics/narcotics, antacid, electrolyte solutions, antihistamine, and antipruritic. Both events resolved without sequelae. The inflammation and 36 days for the cellulitis was discontinued from the study due to the cellulitis required hospitalization). SAEs that were not treatment related were non-cardiac breast carcinoma, appendicitis, pneumonia, keratoacanthoma, squamous cell carcinoma, pneumonia, intraductal proliferative breast cancer, and cholecystitis.

Subjects above the median age (51.5 years) had more total SAEs (9.9%) than subjects younger than the median age (2.2%) (Table 27).

**Table 16. Summary of Treatment-Related SAEs**

#	SAE Type	Relationship to Treatment
1	Injection site inflammation	Treatment related
2	Injection site cellulitis	Treatment related

**Procedural Pain**  
Participants assessed procedural pain (0 = no pain) to 10 (worst imaginable pain) immediately after completion of each treatment. The mean pain score ranged from 0 (no pain) to 10 (worst imaginable pain) after treatment was minimal, with a mean score of 0.0 to 8.0, 0.0 to 7.0, and 0.0 to 7.0 for the initial, touch-up, and repeat treatments, respectively. The treated control participants.

**Facial Function Assessments**



### C. JUVÉDERM® VOLUMA™ XC Cannula Study

#### Study Design

A multi-center, evaluator-blinded, randomized, within-subject, controlled clinical study was conducted to evaluate the safety and effectiveness of JUVÉDERM® VOLUMA™ XC with cannula to correct age-related mid-face volume deficit. Subjects were randomized to undergo treatment with the TSK STERiGLIDE™ 25-G, 1½" cannula in one cheek and a needle in the other cheek. The use of a needle was also permitted in the zygomaticomalar region in the cheek randomized to cannula to achieve optimal correction. At the outset of the study, 60 enrolled subjects underwent treatment with JUVÉDERM® VOLUMA™ XC.

Treated subjects returned for routine safety visits with the TI at 1 and 3 months after the treatment. At these visits, blinded EIs assessed subjects' overall mid-face volume deficit on the validated 6-point photometric MFVDS. Subjects performed self-assessments on the *Satisfaction With Cheeks* module of the FACE-Q® questionnaire.

#### Study Endpoints

The primary effectiveness measure was the blinded EI's assessment at Month 1 of the subject's volume deficit for each cheek on the validated 6-point photometric MFVDS. The primary effectiveness endpoint was to demonstrate non-inferiority of JUVÉDERM® VOLUMA™ XC administered via a TSK STERiGLIDE™ 25-G, 1½" cannula versus needle.

Secondary measures included EI-assessed overall MFVDS responder rates and subject-assessed mean overall satisfaction scores on the validated *Satisfaction With Cheeks* module of the FACE-Q® questionnaire at Month 1. A responder was defined as a subject with ≥ 1 grade improvement in the MFVDS score since baseline.

#### Subject Demographics

A total of 60 subjects received treatment. At baseline, all subjects had moderate, significant, or severe volume deficit (encompassing scores of 3 through 5 on the MFVDS scale) in their mid-face according to the EI's assessments. Subject demographics and pre-treatment characteristics are presented in Table 21.

Table 21. Subject Demographics

Parameter	Total (N = 60)
<b>Gender</b>	
Female	49 (81.7%)
Male	11 (18.3%)
<b>Age</b>	
Median (SD)	54.9 (6.41)
Range (min, max)	37, 65
<b>Fitzpatrick Skin Types</b>	
I	2 (3.3%)
II	15 (25.0%)
III	31 (51.7%)
IV	11 (18.3%)
V	0

questionnaire was 32.1 and, at Month 1, increased by 55.5 points; over 85% of subjects had improved satisfaction with the attractiveness, youthful fullness, and contour of their cheeks.

#### Other Effectiveness Results

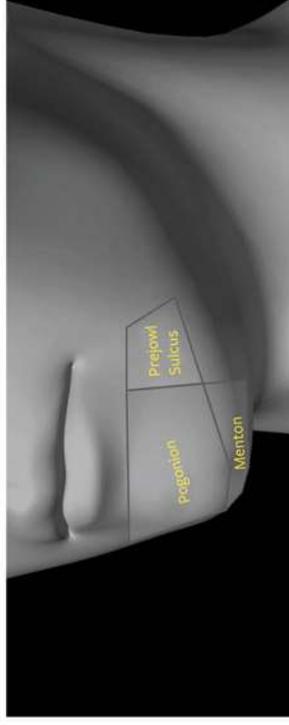
The EI-assessed MFVDS responder rates at Month 3 were 93.3% for cannula-treated and 98.3% for needle-treated cheeks, with a paired difference of -5.0 (95% CI: -10.51 to 0.51).

### D. Pivotal Study for JUVÉDERM® VOLUMA™ XC for Chin Augmentation

#### Study Design

A multi-center, single-blind, randomized, no-treatment controlled pivotal clinical study was conducted to evaluate the safety and effectiveness of JUVÉDERM® VOLUMA™ XC for chin augmentation. Subjects were randomized to treatment or no-treatment control in a 3:1 ratio. Treatment group subjects underwent treatment with JUVÉDERM® VOLUMA™ XC at the outset of the study. The Treating Investigator (TI) determined the appropriate volume of JUVÉDERM® VOLUMA™ XC to be injected in the chin area (did not exceed 4.0 mL for initial and touch-up treatment combined and another 4.0 mL for repeat treatment): pogonion, menton, and pre-jowl sulci, as depicted in Figure 2. Injection in the pogonion was only permitted with a 27-G, ½" needle; a TSK STERiGLIDE™ 25-G, 1½" cannula was permitted for injection in the other treatment areas. The no-treatment control subjects had treatment delayed for 6 months.

Figure 2. Chin Area Treated



location on the chin, while the subject re-"2" objects touching his/her skin.

The light touch test was performed at the chin. The EI pressed Semmes-Weinstein diameters against the subject's skin and filament size that elicits a response at each location. The EI tested facial function using the FACE-Q (FNGS 2.0). The EI assessed the subject requested that the subject make a standard movement while the EI rated the movement: brow, eye, nasolabial fold, and oral commissure. The EI assigned a score from 0 to 4 across the entire face.

#### Study Endpoints

With regard to safety, preprinted diary forms after treatment to record specific signs and symptoms during each of the first 30 days after initial treatment. Subjects were instructed to record response listed on the diary as "Mild (affecting daily activity)," "Severe (unable to perform daily activities)," "None." Adverse events were reported by the subject where applicable. With regard to effectiveness measure was the single-blinded EI's assessment of the subject's chin volume deficit in 2D image analysis using photonic ACRS (Table 22, Figure 3).

The ACRS scale was validated in a 61-subject study. Reviewers were shown photographs of the subject's chin at baseline and at 6-month follow-up time points. The average weighted kappa agreement was 0.87, meaning the review agreement was consistent between the two reviewers. The kappa for the inter-rater agreement for the third reviewer was lower than 0.6 (0.59) and the fourth reviewer was 0.63. The evidence suggested that the scale could be used for clinical trials.

Secondary measures included the status of the subject compared to baseline, of the mean overall satisfaction score of the validated FACE-Q module of the validated FACE-Q module of the validated FACE-Q module where higher scores reflect a better outcome for the subject, and the level of improvement of the subject by the blinded EIs and the subjects. Other secondary measures included the responder rate and ACRS score at baseline and Month 6.

With regard to success/failure criteria, a subject with ≥ 1-point improvement in the baseline score. Effectiveness of JUVÉDERM® VOLUMA™ XC was demonstrated if at least 50% of subjects were responders (≥ 1-point improvement), and if the responder rate for the treatment group was superior to that of the no-treatment control group.

Table 22. Allergan Chin R

Score	Grade	Description
0	None	No chin retrusion; chin midline border vertical line

**Table 24. Demographics and Pre-treatment Characteristics (N = 192)**

Characteristic	Treatment Group (N = 144) % (n)	Control Group (N = 48) % (n)
Gender	Female	85% (41)
	Male	15% (7)
Age (years)	Median	52.5
	Range (min, max)	(23-80)
Race	White	85% (41)
	Black or African-American	13% (6)
	Asian	0% (0)
	American-Indian or Alaska Native	0% (0)
	Multiple	2% (1)
Ethnicity	Hispanic or Latino	13% (6)
	Not Hispanic or Latino	87% (42)
Fitzpatrick Skin Type	I	2% (1)
	II	31% (15)
	III	33% (16)
	IV	17% (8)
	V	13% (6)
	VI	4% (2)

**Treatment Characteristics**

The most common injection techniques at any treatment were bolus and serial puncture. At initial treatment, 99.3% of treatment group subjects were treated in the pogonion, 77.8% in the menton, and 87.5% in the pre-jowl sulci. Needles were used for 100% of subjects, and cannulas were used for 25.0% of subjects at initial treatment. The median total volume used to achieve optimal correction was 2.4 mL (range, 0.7-4.0 mL), with 1.0 mL in the pogonion, 0.5 mL in the menton, and 1.0 mL in the pre-jowl sulci (right and left combined). The median volume at initial treatment was 2.0 mL. A touch-up treatment was performed for 57.3% (110/192) of subjects with a median total volume of 1.0 mL. The repeat treatment was performed for 51.4% (74/144) of subjects and the median volume injected for repeat treatment was 1.2 mL. The volume of JUVÉDERM® VOLUMA™ XC varied depending on the subject's chin volume deficit and treatment goal.

**Primary Effectiveness Results**

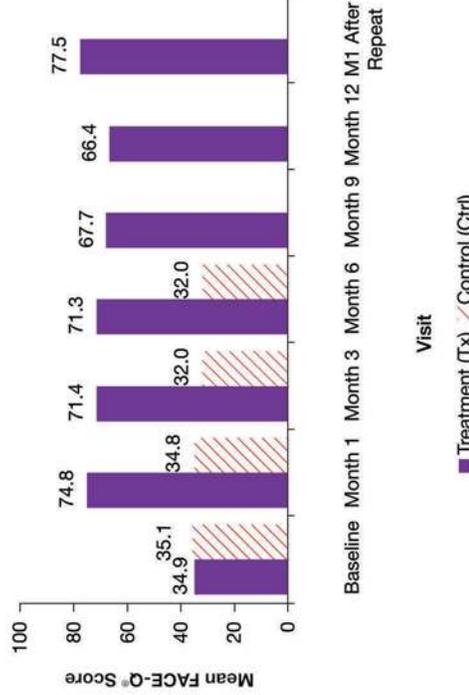
JUVÉDERM® VOLUMA™ XC provided a clinically and statistically significant improvement in chin volume deficit compared to the non-treatment control group. The analysis of primary effectiveness was based on the 126 treatment group and 40 control group evaluable subjects at the 6-month time point. The primary effectiveness endpoint was met in that greater than 50% of subjects in the treatment group were responders (56.3% improved by ≥ 1 point compared with their pre-treatment assessment), and the responder rate for the treatment group was significantly greater ( $p = 0.0019$ ) than the responder rate for the control group (a difference of 28.8%) at Month 6 (Table 25). The primary effectiveness endpoint was below 50% in the following subgroups: older subjects (aged 51.5 years and older), darker skin types (FST V/VI), and males. However, the

The responder rate based on the live assessment of subjects at Month 6 was 91.8% (89/97) for the treatment group and 23.3% (7/30) for the control group.

**Secondary Effectiveness Results**

The FACE-Q® Satisfaction With Chin overall mean score was 34.9 at baseline and improved to 71.3 at Month 6 with the improvement being statistically significant ( $p < 0.0001$ ) (Figure 4). Most of the subjects (91.8%) reported satisfaction with their chin 1 month after treatment. Among other questions, this FACE-Q® questionnaire included questions on satisfaction with chin look in profile view and width of the chin. At Month 1, 88.8% of treatment group subjects were satisfied with how their chin looks in profile view and 95.5% were satisfied with the width of their chin.

**Figure 4. FACE-Q® Satisfaction With Chin Mean Scores by Visit**



The EI and subject GAIS responder rates at Month 6 for the treatment group were 91.2% (114/125) and 87.3% (110/126), respectively, where the responder rate was the percent of subjects with a score of improved or much improved on the GAIS. The EI GAIS responder rate at Month 6 for the untreated control group was 19.5% (8/41) for EI.

An independent, blinded assessment was conducted on full-face 3-dimensional (3D) images collected at randomization (baseline) and at follow-up visits, including the primary time point (Month 6). Three independent raters used the ACRS to assess the severity of chin retrusion in each 3D image. At Month 6 the mean change in ACRS score for the treatment group was statistically superior to that for the untreated control group ( $p < 0.0001$ ). However, at Month 6 the ACRS responder rate for the treatment group was less than 50%, though it was greater than that for the untreated control group (43.0% versus 12.5%, respectively).

**Subgroup Analyses**

The following characteristics were evaluated for potential association with outcomes: Fitzpatrick Skin Type (FST) (Table 26), age (Table 27), gender (Table 28), baseline ACRS, injection volume, cannula usage (Tables 14 and 15), and investigational site.

**Table 26. Effectiveness at 6 Months by FST**

Assessment	Group	Fitz I/II	EFFECTIVENESS	
			Response Rate, % (n/N)	Improvement, % (n/N)
2D ACRS Responder Rate, % (n/N)	Treatment		63.0% (29/46)	
	Control		12.5% (2/16)	
EI GAIS Responder Rate, % (n/N)	Treatment		93.5% (43/46)	
	Control		18.8% (3/16)	
Subject GAIS Responder Rate, % (n/N)	Treatment		87.0% (40/46)	
	Control		30.9% (1/6)	
FACE-Q® Satisfaction With Chin Mean Score (n)	Treatment		71.0 (46)	
	Control		30.9 (16)	
FACE-Q® Satisfaction With Chin Mean Change From Baseline (n)	Treatment		35.0 (46)	
	Control		-2.7 (16)	
Live ACRS Responder Rate, % (n/N)	Treatment		97.1% (33/34)	
	Control		11.1% (1/9)	
Mean Change in Volume in cc Using 3D Image Analysis (n) <sup>a</sup>	Treatment		2.0 (46)	
	Control		-0.03 (16)	
Total TEAEs	Treatment		33.0% (22/66)	
	Control		7.6% (5/66)	
All SAEs	Treatment		7.6% (5/66)	
	Control		98.5% (65/66)	
Injection Site Responses After Initial Treatment	Treatment		98.5% (65/66)	
	Control		98.5% (65/66)	

<sup>a</sup> The N for the effectiveness data is only the treatment group treated subjects.  
<sup>b</sup> Median injection volume for the treatment group was 2.0 mL for the treatment group and 1.2 mL for the control group, respectively.

For subjects with darker skin (FST V/VI) not meet the primary effectiveness endpoint in the treatment group) and performed with control (50.0% responder rate, where a at least a 1-point improvement in the 2D from baseline).

**Table 28. Effectiveness and Safety Results at 6 Months by Gender Subgroups**

Assessment	Group	Gender Subgroup	
		Female	Male
<b>EFFECTIVENESS<sup>a</sup></b>			
2D ACRS Responder Rate, % (n/N)	Treatment	57.7% (64/111)	46.7% (7/15)
	Control	32.4% (11/34)	0% (0/6)
EI GAIS Responder Rate, % (n/N)	Treatment	91.9% (102/111)	85.7% (12/14)
	Control	20.0% (7/35)	16.7% (1/6)
Subject GAIS Responder Rate, % (n/N)	Treatment	86.5% (96/111)	93.3% (14/15)
FACE-Q <sup>b</sup> Satisfaction With Chin Mean Score (n)	Treatment	71.3 (111)	71.0 (15)
	Control	31.5 (34)	35.0 (6)
FACE-Q <sup>c</sup> Satisfaction With Chin Mean Change From Baseline (n)	Treatment	35.0 (111)	39.5 (15)
	Control	-3.9 (34)	0.2 (6)
Live ACRS Responder Rate, % (n/N)	Treatment	92.9% (79/85)	83.3% (10/12)
	Control	26.9% (7/26)	0% (0/4)
Mean Change in Volume in cc Using 3D Image Analysis (n) <sup>b</sup>	Treatment	2.44 (111)	2.39 (15)
	Control	0.01 (34)	0.85 (6)
<b>SAFETY<sup>a</sup></b>			
Total TEAEs	Treatment	35.8% (58/162)	25.0% (5/20)
Treatment-Related TEAEs	Treatment	8.0% (13/162)	5.0% (1/20)
All SAEs	Treatment	6.8% (11/162)	0% (0/20)
Injection Site Responses After Initial Treatment	Treatment	93.8% (151/161)	80.0% (16/20)

<sup>a</sup> The N for the effectiveness data is only the treatment group and the N for the safety data includes all treated subjects.

<sup>b</sup> Median injection volume for the treatment group was 2.0 mL and 3.7 mL in females and males, respectively.

For male subjects (Table 28), the device did not meet the primary effectiveness endpoint (46.7% responder rate in the treatment group). There were no responders in the male control subjects.

The effectiveness of JUVÉDERM<sup>®</sup> VOLUMA<sup>™</sup> XC for chin augmentation in the VOLUMA-006 study was similar for subjects with:

- Moderate or severe chin retrusion
- Treatment with or without cannula

By investigational site, the responder rate for the treatment group based on photo assessment was lower at some sites, but the sample sizes were small.

**8. INSTRUCTIONS FOR USE**

**A. To Attach Needle to Syringe**

**STEP 1: Remove tip cap**

Hold syringe and pull tip cap off the syringe, as shown in Figure A.

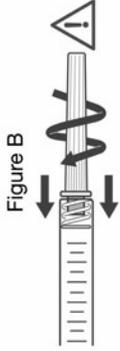
Figure A



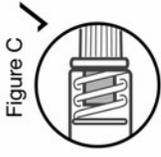
**STEP 2: Insert needle**

**STEP 3: Tighten the needle**

Tighten the needle by turning it firmly in a clockwise direction (see Figure B) until it is seated in the proper position, as shown in Figure C.

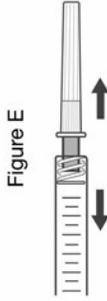


NOTE: If the position of the needle cap is as shown in Figure D, it is not attached correctly. Continue to tighten until the needle is seated in the proper position.



**STEP 4: Remove the needle cap**

Hold the syringe body in one hand and the needle cap in the other. Without twisting, pull in opposite directions to remove the needle cap, as shown in Figure E.



**B. Health Care Professional Instructions**

1. JUVÉDERM<sup>®</sup> VOLUMA<sup>™</sup> XC injectable gel is a crosslinked, robust, injectable gel formulation, injected using a 27-G, 1/2" or 25-G, 1" needle; or a 25-G, 1 1/2" cannula to volumize and contour the cheek for correction of mid-face volume deficit and to augment the chin region to improve the chin profile.
2. The TSK STERIGLIDE<sup>™</sup> 25-G, 1 1/2" cannula was used in the clinical trials (cannula study for cheek and chin study) and is recommended for use with JUVÉDERM<sup>®</sup> VOLUMA<sup>™</sup> XC. An entry point was made in the skin with the TSK 23-G introducer needle. In the chin clinical study, JUVÉDERM<sup>®</sup> VOLUMA<sup>™</sup> XC was injected into the pogonion (needle), menton (needle or cannula), and left and right pre-jowl sulci (needle or cannula).
3. JUVÉDERM<sup>®</sup> VOLUMA<sup>™</sup> XC with needle was studied in all Fitzpatrick Skin Types for deep (subcutaneous and/or suprapariosteal) injection for cheek augmentation to correct age-related volume deficit in the mid-face in adults over the age of 21. However, the safety of JUVÉDERM<sup>®</sup> VOLUMA<sup>™</sup> XC with cannula for cheek augmentation has not been established in Fitzpatrick Skin Types V and VI.
4. 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

9. When using a cannula, an entry point should be made in the skin with the introducer needle. The introducer needle should be removed, and the cannula should be inserted into the skin. The cannula should be inserted into the skin at the desired site, and the cannula should be inserted into the skin at the desired site. The cannula should be inserted into the skin at the desired site. The cannula should be inserted into the skin at the desired site.
10. After insertion of the cannula, an entry point should be made in the skin with the introducer needle. The introducer needle should be removed, and the cannula should be inserted into the skin. The cannula should be inserted into the skin at the desired site, and the cannula should be inserted into the skin at the desired site. The cannula should be inserted into the skin at the desired site. The cannula should be inserted into the skin at the desired site.
11. After the first small amount of material is injected, wait a full 3 seconds to allow the material to settle before proceeding with the rest of the injection. The injection technique for JUVÉDERM<sup>®</sup> VOLUMA<sup>™</sup> XC (subcutaneous and/or submuscular) and the quantity administered may vary by area being treated. Injection of JUVÉDERM<sup>®</sup> VOLUMA<sup>™</sup> XC superficially (intra-dermally), or in larger areas, may result in visible and persistent bruising. Tunneling, fanning, crosshatching, etc. may be used with a needle or cannula. JUVÉDERM<sup>®</sup> VOLUMA<sup>™</sup> XC should be used with a needle to deliver JUVÉDERM<sup>®</sup> VOLUMA<sup>™</sup> XC to achieve optimal results. Bolus and small aliquots may be used to achieve optimal results. Bolus and small aliquots may be used to achieve optimal results. Bolus and small aliquots may be used to achieve optimal results.
12. The injection technique for JUVÉDERM<sup>®</sup> VOLUMA<sup>™</sup> XC (subcutaneous and/or submuscular) and the quantity administered may vary by area being treated. Injection of JUVÉDERM<sup>®</sup> VOLUMA<sup>™</sup> XC superficially (intra-dermally), or in larger areas, may result in visible and persistent bruising. Tunneling, fanning, crosshatching, etc. may be used with a needle or cannula. JUVÉDERM<sup>®</sup> VOLUMA<sup>™</sup> XC should be used with a needle to deliver JUVÉDERM<sup>®</sup> VOLUMA<sup>™</sup> XC to achieve optimal results. Bolus and small aliquots may be used to achieve optimal results. Bolus and small aliquots may be used to achieve optimal results.
13. Tunneling, fanning, crosshatching, etc. may be used with a needle or cannula. JUVÉDERM<sup>®</sup> VOLUMA<sup>™</sup> XC should be used with a needle to deliver JUVÉDERM<sup>®</sup> VOLUMA<sup>™</sup> XC to achieve optimal results. Bolus and small aliquots may be used to achieve optimal results. Bolus and small aliquots may be used to achieve optimal results.
14. JUVÉDERM<sup>®</sup> VOLUMA<sup>™</sup> XC should be used with a needle to deliver JUVÉDERM<sup>®</sup> VOLUMA<sup>™</sup> XC to achieve optimal results. Bolus and small aliquots may be used to achieve optimal results. Bolus and small aliquots may be used to achieve optimal results.
15. With submuscular/suprapariosteal injection, the needle passes through the muscle and into the subcutaneous layer. The needle tip reaches the level of the muscle, and the needle is then inserted into the subcutaneous layer. The needle is then inserted into the subcutaneous layer. The needle is then inserted into the subcutaneous layer.
16. Correct to 100% of the desired volume. The degree and duration of the effect will vary depending on the character of the defect treated and the depth of the implantation. Markedly indurated areas may require more frequent touch-up treatments. Markedly indurated areas may require more frequent touch-up treatments.
17. If immediate blanching occurs, the area should be massaged until it returns to normal. Blanching may represent a vessel occlusion. Do not color correct. Do not color correct. Do not color correct. Do not color correct.
18. The area of lost facial volume should be gently massaged to mold the product into the surrounding tissue and assure that the product conforms to the contour of the face. Overcorrection occurs, massage the area against an underlying superficial touch-up. Overcorrection occurs, massage the area against an underlying superficial touch-up.
19. With patients who have localized swelling, correction is sometimes difficult to achieve. In these cases, it is better to wait for a touch-up treatment. In these cases, it is better to wait for a touch-up treatment.

