

# Injectables for Reconstructive Procedures (for Nebraska Only)

**Policy Number:** CS371NE.A

**Effective Date:** April 1, 2024

[Instructions for Use](#)

Table of Contents	Page
<a href="#">Application</a> .....	1
<a href="#">Coverage Rationale</a> .....	1
<a href="#">Applicable Codes</a> .....	1
<a href="#">Description of Services</a> .....	2
<a href="#">Clinical Evidence</a> .....	2
<a href="#">U.S. Food and Drug Administration</a> .....	4
<a href="#">References</a> .....	4
<a href="#">Policy History/Revision Information</a> .....	5
<a href="#">Instructions for Use</a> .....	5

### Related Policy

- [Cosmetic and Reconstructive Procedures \(for Nebraska Only\)](#)

## Application

This Medical Policy only applies to the State of Nebraska.

## Coverage Rationale

[See Benefit Considerations](#)

### Dermal Filler Injections

Radiesse and Sculptra are proven, medically necessary, and reconstructive for treating facial defects due to facial lipoatrophy in persons with human immunodeficiency virus (HIV). The use of other dermal filler products is considered cosmetic.

### Injectable Bulking Agents

Injectable bulking agents (e.g., Prolaryn, Prolaryn Plus®) are proven, medically necessary, and reconstructive for treatment of vocal fold insufficiency/dysfunction when used according to U.S. Food and Drug Administration (FDA) labeled indications, contraindications, warnings, and precautions.

## Applicable Codes

The following list(s) of procedure and/or diagnosis codes is provided for reference purposes only and may not be all inclusive. Listing of a code in this policy does not imply that the service described by the code is a covered or non-covered health service. Benefit coverage for health services is determined by federal, state, or contractual requirements and applicable laws that may require coverage for a specific service. The inclusion of a code does not imply any right to reimbursement or guarantee claim payment. Other Policies and Guidelines may apply.

HCPCS Code	Description
G0429	Dermal Filler injection(s) for the treatment of facial lipodystrophy syndrome (LDS) (e.g., as a result of highly active antiretroviral therapy)
L8607	Injectable bulking agent for vocal cord medialization, 0.1 ml, includes shipping and necessary supplies
Q2026	Injection, Radiesse, 0.1ml
Q2028	Injection, sculptra, 0.5 mg

## Description of Services

It is estimated that approximately 50% of patients with human immunodeficiency virus (HIV) infection who are treated with highly active antiretroviral therapy (HAART) develop significant facial lipoatrophy. This feature carries a negative social stigma and imparts such a poor body image that many individuals develop severe body dysmorphic disorder which may result in non-compliance with HAART, discontinue visits to the infectious disease clinics and stop taking other medications. Injectable fillers have been approved by the FDA to treat this facial lipoatrophy in HIV patients and include poly-L-lactic acid (Sculptra), calcium hydroxylapatite microspheres and carboxymethylcellulose (Radiesse) (Guzman and Al Aboud, 2018).

Vocal cord insufficiency (also known as vocal cord dysfunction, paradoxical vocal fold movement, glottal insufficiency) is a condition in which one or both of the vocal cords do not open correctly. When the glottis does not close properly, vocal fatigue, poor voice quality or tone and difficulty speaking, swallowing, or coughing may occur. Individuals with vocal fold insufficiency are at greater risk for larynx penetration, aspiration, and pneumonia (Rajaei, 2014). Treatment options include voice therapy, thyroplasty or vocal fold injection. Vocal fold injection involves injecting a bulking agent into the affected fold to assist it in sufficiently aligning with the opposing fold (Zhang 2015).

## Clinical Evidence

### Human Immunodeficiency Virus Facial Lipoatrophy

Vallejo et al. (2018) conducted a clinical trial including 147 patients with HIV-induced lipoatrophy treated with Sculptra (poly-L-lactic acid), Radiesse (calcium hydroxylapatite), Aquamid (polyacrylamide), or autologous fat. Objective and subjective changes were evaluated during a 24-month follow-up period. Number of sessions, total volume injected, and overall costs of treatment were also analyzed. Objective improvement in facial lipoatrophy, assessed by the surgeon in terms of changes from baseline using an established classification system, was reported in 53 percent of the cases. Patient self-evaluation showed a general improvement after the use of facial fillers. Patients reported being satisfied with the treatment and with the reduced impact of lipodystrophy on their quality of life. Despite the nonsignificant differences observed in the number of sessions and volume, autologous fat showed significantly lower costs than all synthetic fillers ( $p < 0.05$ ). The authors concluded that surgical treatment of HIV-associated facial lipoatrophy using dermal fillers is a safe and effective procedure that improves the aesthetic appearance and the quality of life of patients. Permanent fillers and autologous fat achieve the most consistent results over time.

Kraus et al. (2016) reported that the QOL outcomes associated with treatment of HIV facial lipoatrophy (FLA) with poly-L-lactic acid and similar agents appears to improve QOL as assessed by various QOL instruments. Additional studies are required to identify a unifying QOL instrument to effectively assess longitudinal QOL outcomes and to compare treatment modalities. Ho and Jagdeo (2016) found similar QOL results in 19 patients that completed a 12-month follow-up. The authors recommend use of the Facial Appearance Inventory (FAI) and FACE-Q in future studies for HA filler treatment of HIV FLA.

Jagdeo et al. (2015) conducted a systematic review of filler agents for aesthetic treatment of HIV facial lipoatrophy (FLA). A search, using predetermined criteria, was conducted in Medline. A total of 321 articles were identified and after screening, 76 original articles were deemed suitable for the review. Of those, 29 articles evaluated poly-L-lactic acid (PLLA; Sculptra) and 6 evaluated calcium hydroxylapatite (CaHA; Radiesse). Based on three randomized controlled trials with 2 follow-up studies, 20 observational studies and 4 case reports, PLLA for the treatment of HIV FLA was assigned a B-level recommendation. Six studies evaluated the efficacy and safety of CaHA for treatment of HIV FLA and of those, two showed that CaHA improvement of FLA severity was maintained for 12 months. Based on 6 observational studies, CaHA was assigned a C-level recommendation. The authors concluded that current literature suggests that filler agents for treatment of HIV FLA are an effective and generally safe option for aesthetic improvement and help improve patients' quality of life.

## Vocal Fold Insufficiency

In 2022, Dwyer et al. published the preliminary results from a single surgeon on the efficacy of a novel silk-hyaluronic acid vocal cord augmentation material.

Carroll and Rosen (2011) evaluated the long-term effectiveness of CaHA as a vocal fold injectable by accessing data from a cohort of patients who underwent injection for glottal insufficiency. The change in Voice Handicap Index (VHI)-10 scores between pre injection scores and best post injection scores as well as between the pre injection and the most recent VHI-10 scores were used as primary outcome measures to determine the persistence of benefit or the time to loss of benefit. Ninety patients who underwent 108 vocal fold injections with CaHA were evaluated for inclusion. Twenty patients with 22 injections met the criteria for inclusion. Fourteen of 22 (64%) subjects showed loss of benefit of the CaHA material. The average length of benefit was 18.6 months, with a range of 8 to 36 months. Three complications were identified among the original cohort of 108 injections. The authors concluded that CaHA remains a safe and effective long-term vocal fold injectable with an average length of benefit of 18.6 months.

Rosen et al. (2009) evaluated the long-term effectiveness of calcium hydroxylapatite (CaHA) vocal fold injection for patients with glottal insufficiency in a multicenter, open-label, prospective clinical study (n = 63). Voice-related outcome measures were collected for pre-injection, 1, 3, 6, and 12 months. Utilizing the Voice Handicap Index-10, visual analog scale (vocal effort), Consensus Assessment Perceptual Evaluation V (judgments of voice severity), and objective voice measures of glottal closure (maximum phonation time and S:Z ratio), paired t tests showed significant improvements after treatment. A 22% further treatment rate was found at the 12-month time point. The authors concluded that the one-year results in this cohort of patients with glottal incompetence treated with CaHA vocal fold injection demonstrate that excellent clinical results were achieved.

The U.K.'s National Institute for Health and Care Excellence (NICE) provided guidance in 2005 on collagen injection for vocal cord augmentation. NICE concluded that the current evidence suggests collagen injection is efficacious for short-term symptom relief and there were no major safety concerns, and that patients should be fully informed of the long-term efficacy and the alternative treatment options.

## Clinical Practice Guidelines

### American Academy of Otolaryngology – Head and Neck Surgery (AAOHNS)

In a 2013 clinical practice guideline on improving voice outcomes after thyroid surgery, the made a strong recommendation for identifying the recurrent laryngeal nerve(s) during thyroid surgery, and recommendations to examine and document voice and vocal fold mobility both before and after surgery. AAOHNS recommended that if patients have voice change or abnormal vocal fold mobility after surgery, surgeons should provide counsel on options for rehabilitation. Vocal fold injection medialization is described as a temporary intervention that may reduce the need for later surgical reconstruction.

In a 2018 practice guideline on dysphonia (hoarseness), the AAOHNS states that clinicians should advocate for surgery as a therapeutic option for patients with dysphonia with conditions amenable to surgical intervention, such as suspected malignancy, symptomatic benign vocal fold lesions that do not respond to conservative management, or glottic insufficiency. This surgery includes vocal fold injection medialization using bulking agents.

### American Laryngological Association (ALA)

In a 2019 guideline on vocal fold injection augmentation, the ALA states that this procedure is indicated glottal insufficiency due to unilateral vocal fold paralysis or paresis, vocal fold atrophy, vocal fold scar, sulcus vocalis, or loss of the soft tissue of the vocal folds. It is contraindicated for the individuals with the following:

- Unstable cardiopulmonary status
- Allergy to any injectable materials including local anesthetic
- Poor exposure of the endolarynx due to a prolapsing arytenoid
- Severe supraglottic constriction, poorly defined anatomic landmarks of the neck

Relative contraindications:

- Individuals with a large posterior glottal gap or large interarytenoid defects that require laryngeal framework surgery
- Individuals being treated with anticoagulation medications

# U.S. Food and Drug Administration (FDA)

This section is to be used for informational purposes only. FDA approval alone is not a basis for coverage.

On November 8, 2018, the FDA cleared the Silk Voice® (Sofregen Medical, Inc.) synthetic polymer for vocal fold medialization and vocal fold insufficiency. For additional information, refer to the following website:

[https://www.accessdata.fda.gov/cdrh\\_docs/pdf18/K180631.pdf](https://www.accessdata.fda.gov/cdrh_docs/pdf18/K180631.pdf). (Accessed May 22, 2023)

On December 22, 2006, the FDA approved Radiesse, an injectable (under the skin) implant to restore or correct signs of facial lipodystrophy, or fat loss, in people with human immunodeficiency virus (HIV). For additional information, refer to the following website: [https://www.accessdata.fda.gov/cdrh\\_docs/pdf5/P050052b.pdf](https://www.accessdata.fda.gov/cdrh_docs/pdf5/P050052b.pdf). (Accessed March 28, 2023)

On August 3, 2004, the FDA approved Sculptra, an injectable filler to correct facial fat loss in people with HIV (FDA, 2004). Sculptra is an injectable form of poly-L-lactic acid, a biodegradable, biocompatible synthetic polymer from the alpha-hydroxy-acid family. For additional information refer to the following: [https://www.accessdata.fda.gov/cdrh\\_docs/pdf3/p030050b.pdf](https://www.accessdata.fda.gov/cdrh_docs/pdf3/p030050b.pdf). (Accessed March 28, 2023)

On March 7, 2007, the FDA approved the Radiesse Laryngeal Implant, a sterile, non-pyrogenic injectable material consisting of calcium hydroxylapatite (CaHA) suspended in an aqueous formulation of USP grade pharmaceutical excipients consisting of sterile water, glycerin, and sodium carboxymethylcellulose, stabilized with a phosphate buffer. It is indicated for vocal fold medialization and vocal fold insufficiency that may be improved by injection of a soft tissue hulk agent. For additional information refer to the following: [https://www.accessdata.fda.gov/cdrh\\_docs/pdf7/K070090.pdf](https://www.accessdata.fda.gov/cdrh_docs/pdf7/K070090.pdf). (Accessed March 28, 2023)

Additionally, the FDA 510(k) documents refer to Prolaryn products above using their original product names. Prolaryn Plus was originally cleared as the Radiesse Laryngeal Implant (Bioform Medical, Inc., Franksville, WI, USA), and Prolaryn Gel was originally cleared for marketing as the Laryngeal Augmentation Implant (Bioform, Inc.).

## References

American Laryngological Association. Injection Augmentation. 2019. Available at: [https://alahns.org/wp-content/uploads/CLC/57\\_CLC\\_Injection-Augmentation.pdf](https://alahns.org/wp-content/uploads/CLC/57_CLC_Injection-Augmentation.pdf). Accessed May 22, 2023.

American Academy of Otolaryngology-Head and Neck Surgery. Clinical Practice Guideline: Hoarseness (Dysphonia). 2018.

American Academy of Otolaryngology-Head and Neck Surgery Clinical Practice Guideline: Improving Voice Outcomes after Thyroid Surgery. 2013.

Carroll TL, Rosen CA. Long-term results of calcium hydroxylapatite for vocal fold augmentation. *Laryngoscope*. 2011 Feb;121(2):313-9.

Dwyer CD, Devore E, Kridgen S, et al. Preliminary Results on the Safety and Efficacy of Silk-Hyaluronic Acid for Treatment of Glottic Insufficiency. *J Voice*. 2022 Dec 16:S0892-1997(22)00362-9.

Guzman N and Al About AM. HIV-associated lipodystrophy. *StatPearls* [Internet]. October 2018. Available at: <https://www.ncbi.nlm.nih.gov/books/NBK493183/>. Accessed May 12, 2023.

Ho D, Jagdeo J. Patient reported outcomes from HIV facial lipoatrophy treatment with a volumizing hyaluronic acid filler: a prospective, open-label, phase I and II study. *J Drugs Dermatol*. 2016 Sep 1;15(9):1064-9.

Jagdeo J, Ho D, Lo A, et al. A systematic review of filler agents for aesthetic treatment of HIV facial lipoatrophy (FLA). *J Am Acad Dermatol*. 2015 Dec;73(6):1040-54.e14.

Kraus CN, Chapman LW, Korta DZ, et al. Quality of life outcomes associated with treatment of human immunodeficiency virus (HIV) facial lipoatrophy. *Int J Dermatol*. 2016 Dec;55(12):1311-1320.

National Institute for Health and Care Excellence (NICE). Interventional procedures guidance. Collagen injection for vocal cord augmentation. 2005

Rosen CA, Gartner-Schmidt J, Casiano R, et al. Vocal fold augmentation with calcium hydroxylapatite: twelve-month report. *Laryngoscope*. 2009 May;119(5):1033-41.

## Policy History/Revision Information

Date	Summary of Changes
04/01/2024	<p><b>Template Update</b></p> <ul style="list-style-type: none"> <li>Created service-specific policy version for content previously included in the Medical Policy titled <i>Omnibus Codes (for Nebraska Only)</i></li> </ul> <p><b>Coverage Rationale</b></p> <p><b>Dermal Filler Injections</b></p> <ul style="list-style-type: none"> <li>Added language to indicate the use of other dermal filler products [not listed as proven, medically necessary, and reconstructive in the policy] are considered cosmetic</li> </ul> <p><b>Injectable Bulking Agents</b></p> <ul style="list-style-type: none"> <li>Replaced language indicating “Prolaryn and Prolaryn Plus® (<i>formerly the Radiesse Laryngeal Implant</i>) are proven and medically necessary and reconstructive for treatment of vocal fold insufficiency” with “<i>injectable bulking agents</i> (e.g., Prolaryn, Prolaryn Plus®) are proven, medically necessary, and reconstructive for treatment of vocal fold insufficiency/<i>dysfunction when used according to U.S. Food and Drug Administration (FDA) labeled indications, contraindications, warnings, and precautions</i>”</li> </ul> <p><b>Supporting Information</b></p> <ul style="list-style-type: none"> <li>Added <i>Description of Services</i> and <i>FDA</i> section</li> <li>Updated <i>Clinical Evidence</i> and <i>References</i> sections to reflect the most current information</li> <li>Archived previous policy version CS087NE.AL</li> </ul>

## Instructions for Use

This Medical Policy provides assistance in interpreting UnitedHealthcare standard benefit plans. When deciding coverage, the federal, state, or contractual requirements for benefit plan coverage must be referenced as the terms of the federal, state, or contractual requirements for benefit plan coverage may differ from the standard benefit plan. In the event of a conflict, the federal, state, or contractual requirements for benefit plan coverage govern. Before using this policy, please check the federal, state, or contractual requirements for benefit plan coverage. UnitedHealthcare reserves the right to modify its Policies and Guidelines, as necessary. This Medical Policy is provided for informational purposes. It does not constitute medical advice.

UnitedHealthcare may also use tools developed by third parties, such as the InterQual® criteria, to assist us in administering health benefits. The UnitedHealthcare Medical Policies are intended to be used in connection with the independent professional medical judgment of a qualified health care provider and do not constitute the practice of medicine or medical advice.