
CAREFULLY READ ALL INSTRUCTIONS PRIOR TO USE

INDICATIONS FOR USE

The *Laterra™ Absorbable Nasal Implant* is indicated for supporting upper and lower lateral nasal cartilage.

CAUTION: Federal law restricts this device to sale by or on the order of a physician.

CONTRAINDICATIONS

- Presence of an active infection at the implantation site.
- Patients known or suspected to have an allergy to PLA or absorbable materials.

WARNINGS

- Intended for single use only. Do NOT re-sterilize and/or reuse.
- Do not use the device if the integrity of the sterile packaging has been compromised or a loss of sterility is suspected.
- Improper patient selection, surgical site preparation, or implantation may potentially cause device failure and/or adverse reactions.
- The *Laterra Absorbable Nasal Implant* is not intended to replace normal healthy bone or cartilage.
- Subsequent infection may require Implant removal.
- Do not expose the *Laterra Absorbable Nasal Implant* to high temperatures and do not use if package temperature indicator shows exposure to temperature above 38 °C.

POSSIBLE ADVERSE EFFECTS

Adverse reactions typical to surgically implanted materials may occur. These include:

- Inflammatory foreign body reaction, foreign body sensation, pain or discomfort, infection, and extrusion.
- Excessive activity, trauma, or loading may lead to bending, fracture, loosening, and/or migration of the Implant.
- Implants placed near the skin surface may be palpable or cause skin irritation.
- Temporary hematoma from cannula insertion.

PACKAGING

- **STERILE:** The Implant is sterilized with gamma radiation. Do not use if the package is open or damaged.
The Accessory Delivery Device and Implant Positioning Guide are sterilized with E-beam radiation. Do not use if the package is open or damaged.
- **IMPLANT STORAGE:** Store in a cool, dry location at or below 30 °C.
- **ACCESSORY DELIVERY DEVICE STORAGE:** Store in a cool dry place.
- **SINGLE USE:** The *Laterra Absorbable Nasal Implant*, *Accessory Delivery Device* and *Implant Positioning Guide* are intended for single patient use only. The *Accessory Delivery Device* may be used to deliver multiple *Laterra Absorbable Nasal Implants* to a single patient in a single clinical setting. Do NOT re-sterilize and/or reuse.

DEVICE DESCRIPTION

The Spirox™ *Latera Absorbable Nasal Implant* system is composed of the *Latera Absorbable Nasal Implant* (Implant) and the *Accessory Delivery Device* (Delivery Device). An *Implant Positioning Guide* is provided to serve as an external visual aid prior to Implant placement.

The Implant is predominantly cylindrical in shape with a diameter of 1 mm and an overall length of 24 mm with a forked distal end for anchoring and features on the proximal end for increased flexibility. The Implant is composed of Poly (L-lactide-co-D-L-lactide) 70:30 copolymer which is absorbed in the body over a period of approximately 18 months. The Implant is provided in a plastic tray with a slidable lid. The Implant is depicted in **Figure 1** below.

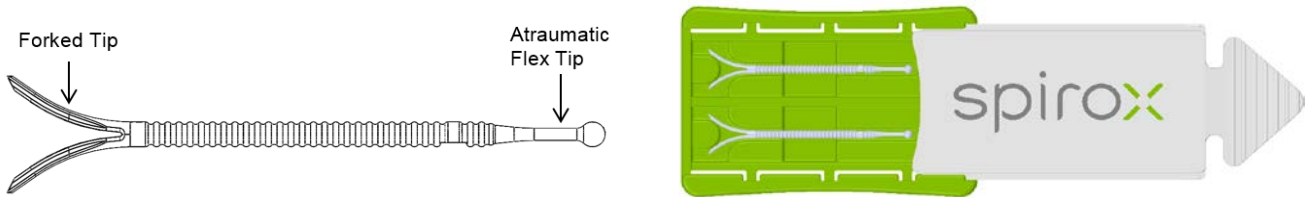


Figure 1: Latera Absorbable Nasal Implant and Packaging

The Delivery Device is a single use device composed of a handle body, deployment plunger and pushrod, and a 16 gauge delivery cannula with a depth marker and protective cover. The handle includes an implant loading port which enables the loading of the Implant. The handle uses an internal transition between the loading position and the cannula to collapse the implant forks within the cannula inner lumen and prepare the Implant for deployment. The Implant Positioning Guide is packaged with the Delivery Device to aid the physician in preparing for the procedure and identifying target Implant location. The Delivery Device and the Implant Positioning Guide are shown in **Figure 2** below.

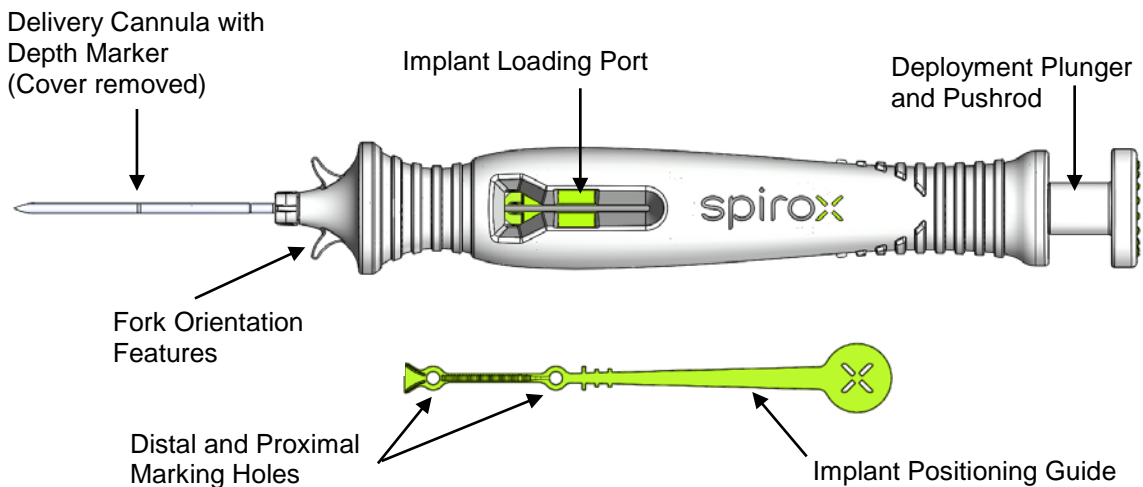


Figure 2: Delivery Device and Implant Positioning Guide

COMPATIBILITY

- The *Latera Absorbable Nasal Implant* is compatible with the *Accessory Delivery Device*. The *Accessory Delivery Device* should be used for proper insertion of the *Absorbable Nasal Implant*.

INSTRUCTIONS FOR USE

Implant Target Location and Device Preparation:

1. Standard surgical procedures should be used to prepare the site for implantation (e.g. cleaning, disinfection, anesthetic, etc.)
2. Prior to implantation, identify the target implant location and cannula insertion trajectory. The forked distal tip of the Implant should be positioned adjacent and across the maxilla bone and the cylindrical portion of the Implant should be positioned to support the upper and lower lateral cartilage as shown in **Figure 3**.

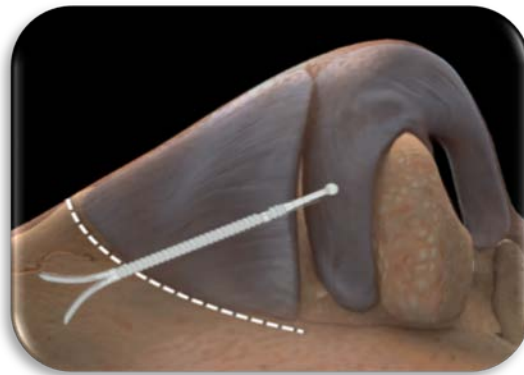


Figure 3: Example implant location showing support of upper and lower lateral cartilage and position of Implant forks across maxilla bone to cartilage transition (dashed line).

3. Use the Implant Positioning Guide to mark the surgical trajectory as shown in **Figure 4** using a standard surgical pen. The holes provided on the Implant Positioning Guide allow for marking the base of Implant forked tip and the spherical end of the atraumatic proximal tip. The distal mark correlates to the final position of the cannula tip prior to implant delivery.

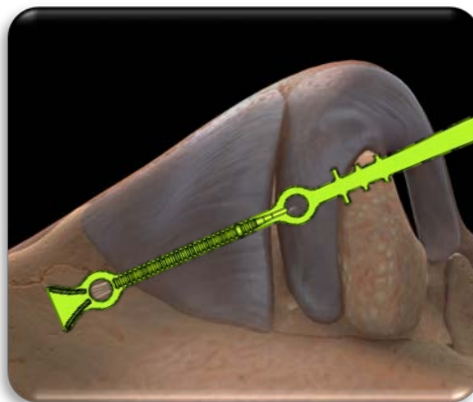


Figure 4: Implant Positioning Guide superimposed on upper and lower lateral cartilage

4. Retract the deployment plunger from the Delivery Device until the pushrod is clear of the implant loading port.

- Using surgical tweezers transfer the Implant from the plastic tray to the loading port of the Delivery Device as shown in **Figure 5**.

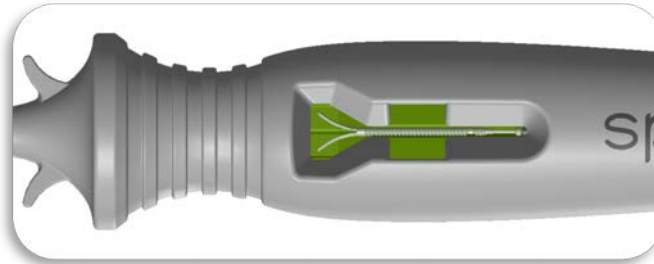


Figure 5: Delivery Device with Implant Loaded

- Advance the plunger to move the Implant into the delivery cannula until the marker on the plunger is flush with the back of the device handle. This positions the Implant at the tip of the cannula in the pre-deployment position. Proper plunger marker location is shown in **Figure 6** below.

Note: If the plunger is advanced too far, the Implant may exit the delivery cannula. If this should happen, completely advance the plunger so the forks exit the cannula. Carefully remove the Implant from the cannula and repeat the setup process from Step 4.

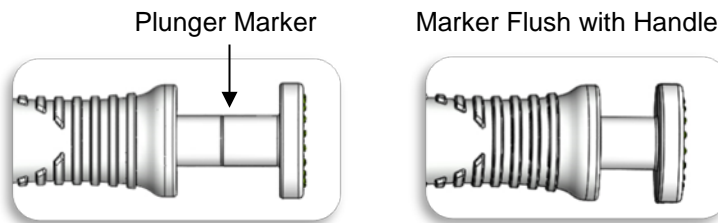


Figure 6: Delivery Device plunger marker position

Implant Delivery:

- Under direct visualization, the Delivery Device cannula is inserted through the nasal mucosa of the lateral wall within the nasal cavity near the margin of the nostril. Approximate Delivery Device orientation and cannula trajectory is shown in **Figure 7** below.

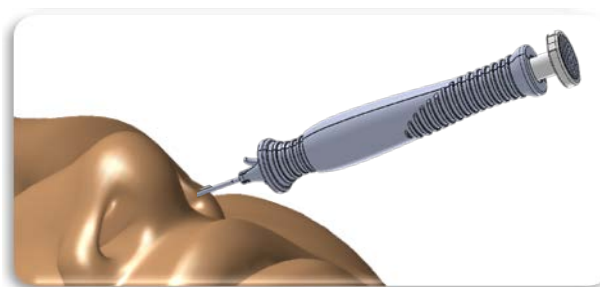


Figure 7: Approximate Delivery Device orientation relative to nasal anatomy

8. Identify the cannula insertion point, **Figure 8(a)** below, to provide the maximum distance between the cannula insertion point and the target position of the proximal tip of the Implant to ensure the Implant is fully embedded within the tissue, **Figure 8(b)** below.

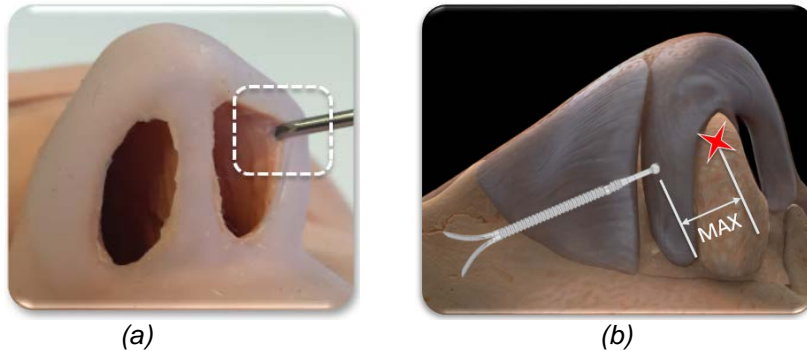


Figure 8: Images showing (a) approximate cannula pierce position at the margin of the nostril and (b) the distance intended to be maximized between cannula pierce point and the proximal tip of the Implant

9. The cannula should pass along the center of the thickness of the lateral wall to avoid piercing medial through the mucosa or lateral through the skin as it traverses the wall to the target location.
10. When the cannula reaches the bony cartilaginous junction, the cannula is passed over the maxillary bone to the target depth.
11. If the nasal tissue has compressed or bunched-up during cannula insertion, relax the tissue to its native position. Verify that the cannula is inserted deep enough such that the cannula depth marker is buried below the mucosal surface at the insertion point. An example of appropriate cannula position within the nasal lateral wall is shown in **Figure 9** below.

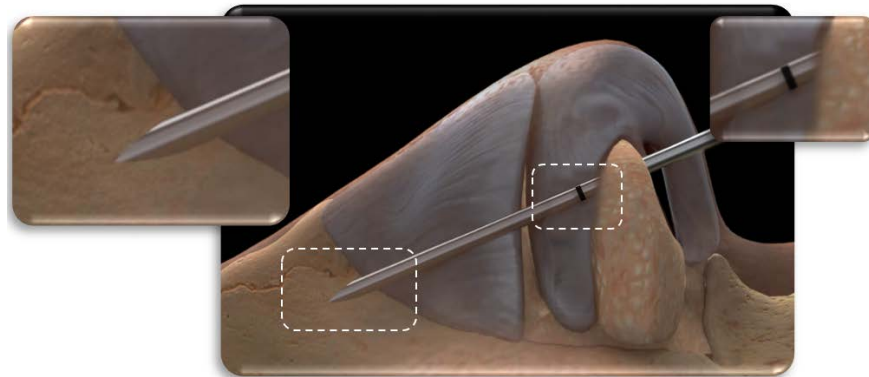


Figure 9: Cannula at target depth mid thickness within the lateral wall structure. The intended position of the cannula tip and cannula depth marker are shown in the magnified views

12. The Implant forks will expand to their original shape as they exit the cannula tip in the orientation they are loaded. Using the Implant fork orientation features on the distal end of the Delivery Device as a reference for fork orientation, verify that the Delivery Device rotation about its axis is appropriate to deliver the forks parallel to the underlying bone.

CAUTION: The Implant forks diverge as they engage with the tissue; orientation of the forks must be controlled by orienting the Delivery Device to prevent forks from piercing towards skin surface.

13. When the cannula is in the appropriate location and orientation, the Delivery Device must remain fixed in position while the plunger is slowly advanced to the fully depressed position. The Implant forks are driven approximately 4 mm into the tissue beyond the distal tip of the cannula. The Implant delivery process is shown in **Figure 10** below.

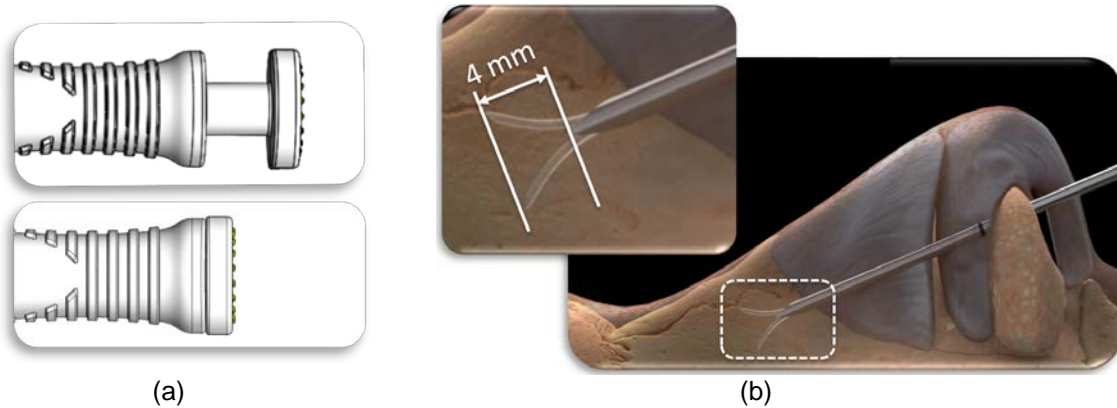


Figure 10: Images of the Delivery Device proximal end and cannula positioned within the lateral wall showing Implant deployment process including: (a) Actuation of the Delivery Device plunger and (b) Implant forks expanded approximately 4 mm distal to the cannula tip after deployment.

CAUTION: The forks will advance approximately 4 mm beyond the tip of the cannula. This should be accounted for in determining the extent of cannula advancement.

CAUTION: The Delivery Device must be held in place while the plunger is depressed to ensure minimal Delivery Device movement during deployment.

14. After depressing the plunger, slowly withdraw the cannula from the tissue. Take care to not alter the angle or rotational orientation of the Delivery Device while withdrawing or the Implant could be dislodged.
15. After complete withdrawal, visually examine the insertion site to ensure the Implant is not exposed and is fully embedded within the tissue. Do not compress or fold the lateral wall to visualize the insertion site.
16. If multiple implantation attempts are required, a second insertion should utilize a different pierce point within the mucosa and follow a different cannula trajectory.
17. Counsel the patient to avoid manipulation of the nose during the acute healing period (e.g., Week 1: do not pinch or blow nose; Weeks 1-2: avoid strenuous activity; Weeks 1-4: do not place objects inside of nose).

DISPOSAL

The *Accessory Delivery Device* should be disposed of in a biohazard sharps disposal container. The *Implant Positioning Guide* may be disposed of along with standard medical waste.

GRAPHIC SYMBOLS CONTAINED IN DEVICE LABELING

	Sterilized using Irradiation		Keep Away from Sunlight
	Batch Code		Do Not Re-Use
	Catalog Number		On Order of Physician Only
	Manufactured For		Date of Manufacture
	Use By		Consult Instructions For Use
	Contents of Package/Box		Upper Limit of Temperature
	Keep dry		Do not use if package is damaged

TRADEMARKS AND PATENTS

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