

**DIIVA**  
*Dynamic Implant Valve Approach*

# Innovative Sinus Lift Technology



UpHeal Dental Ltd.

## >> DIVA Sinus Lift Technology is here!

- > DIVA is a new sinus lift technology based on a special, hollow implant design - a "smart" implant - through which the entire sinus lift procedure takes place. Membrane lifting, membrane movement detection, and injection of Synthetic Bone Paste can all be performed through the implant. The DIVA procedure is minimally invasive, so the risk of membrane damage is considerably lower.
- > Simple and easy to learn, with no need for additional specialized tools or accessories, DIVA sinus lift procedures can be performed by specialized dental surgeons and general dental practitioners alike.

### GREAT NEWS FOR PATIENTS!

- > DIVA Sinus Lift Technology is great news for patients! Patients will benefit from minimal discomfort during the procedure, faster recovery times including at the prosthetic stage, fewer post-op issues and significantly shorter chair time and overall treatment time.

## >> Main Advantages of DIVA

### DIVA OFFERS MANY ADVANTAGES OVER OTHER SINUS LIFT OPTIONS:

- > Simple and easy-to-learn - it can be performed by general practitioners and specialized dental surgeons alike.
- > Minimally invasive - with far lower risk of infection and other post-op complications; may be suitable for patients with complex clinical backgrounds
- > Enables localized sinus elevation
- > Significantly reduced risk of membrane rupture
- > Significantly shorter chair time due to simple and efficient procedure
- > Possible even in cases of minimal residual bone (3 mm)
- > No additional specialized tools are required
- > Significantly reduced post-op side effects and patient recovery periods including at the prosthetic stage



## >> DIVA's Unique Features and Innovations:

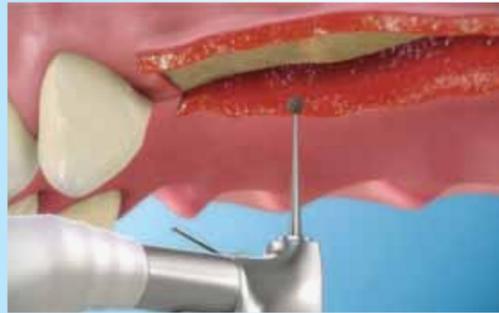
### The DIVA "smart" implant, with its special hollow configuration and characteristics, presents various unique features and innovations:

- > The DIVA is hollow throughout its entire length, with a structure that has been tested and found to be much more resistant to stresses and fractures than regular implants.
- > A lower aperture enables convenient access and helps to attain primary stability.
- > 4 upper apertures help regulate fluid pressures to reduce the risk of damage to the membrane.
- > A unique inner valve screw hermetically seals the implant against oral flora.
- > Membrane Safety:
  - Membrane separation and lifting is performed gradually via a unique, very gentle process that greatly reduces the risk of membrane rupture.
  - The Diva implant's rounded apex significantly reduces the risk of membrane rupture.
- > Indicators during the procedure help monitor the process:
  - Bleeding visible at the sinus membrane lifting stage indicates the breaking of the sinus floor.
  - In some cases sinus membrane movement can be detected through the implant, indicating the membrane is intact.
  - Full endoscopic control over the implant and surrounding bone throughout the entire procedure.
- > The entire Sinus Lift procedure is performed via the DIVA: membrane separation and lifting and Synthetic Bone Paste injection.
- > A localized elevation: The DIVA sinus lift procedure enables localized penetration and membrane lifting of the sinus cavity via the implant
- > The "smart" implant enables post-op observation of the sinus as well as injection of medications, if necessary, by unscrewing and removing the inner valve screw.
- > The DIVA implant failure rate is comparable to those of other procedures.

The features above make DIVA the obvious choice for expert dental surgeons and general practitioners alike, who wish to offer their patients an innovative, lower-risk and less invasive option for their sinus lift implant procedures without compromising quality.



## >> Main steps



**1. Cutting the gums:** At the start of the procedure, the gums are cut.



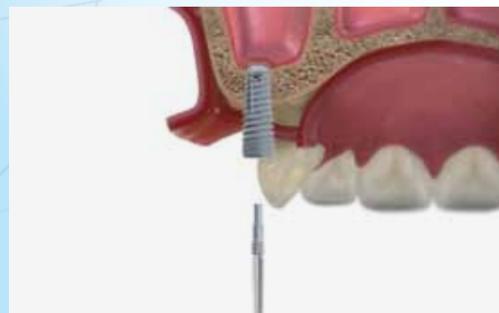
**2. Drilling with a pilot drill:** After review of the CT scan, use a round bur to indicate the implant's exact location. Start initial drilling beneath the sinus floor with a standard 2 mm pilot drill until a depth of 1 mm beneath the sinus floor. Use a drill stopper to achieve the correct depth.



**3. Fracturing the sinus floor:** Insert the special concave Osteotome (tapered 2.2mm - 2.7mm) with a stopper (set according to the CT scan) into the space created by the pilot drill. Gently apply pressure until the sinus floor fractures.

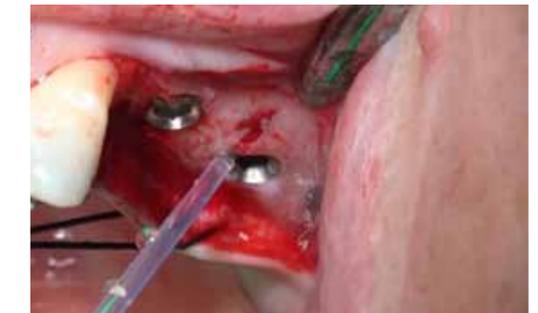


**4. Achieving initial stability and removing the inner long valve screw:** Insert the DIVA using controlled rotation until initial primary stability is obtained. Then, use the Internal Screw Driver (included in the kit) to remove the long valve screw located inside the DIVA.



**5. Membrane separation and lifting:** Attach a full saline syringe to the IV Cannula and gently introduce 1cc of saline via the DIVA to separate the membrane from the bone. Remove the syringe and cannula, then use a ratchet or socket screwdriver and carefully rotate to screw in the DIVA 1mm to lightly stretch and raise the membrane. Repeat this rinse and ratchet procedure several times until the DIVA is fully inserted. With this slow, gentle procedure, the membrane elevates yet remains intact.\*

\* Note: During this stage there will be bleeding through the DIVA canal, indicating the breaking of the sinus floor.



**6. Synthetic Bone Paste Injection:** Attach the Synthetic Bone Paste syringe (included in the kit) to the IV cannula and inject the material via the implant (approximately 0.5cc per implant) until excess material exudes from the bottom of the DIVA.

**7. External rinse:** Use the saline syringe to rinse the exterior of the DIVA implant from any residual Synthetic Bone Paste.



**8. Sealing the DIVA:** Use the Internal Screw Driver to screw in the short valve screw (included in the kit) all the way in to achieve absolute sealing of the DIVA.

**9. End of procedure:** Cap the DIVA with the cover screw (included in the kit). After a 4-6 month osseointegration period, remove the cover screw to expose the DIVA implant. Confirm that the inner valve screw has remained tight. Then, cap the DIVA with the healing screw.

# >> DIVA's sinus lift procedure



Osteotome use



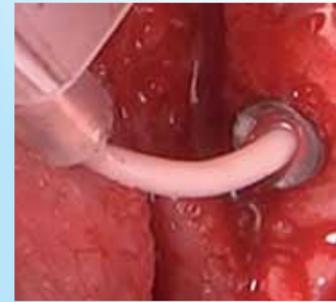
Insert the DIVA



Removing the Long Valve Screw

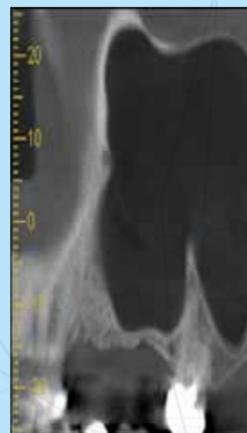


Membrane Separation and Lifting



Synthetic Bone Paste injection

## CT SCAN



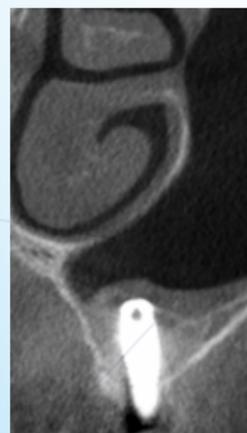
Before the procedure



Immediate-implant A



12W post-op implant A



12W post-op implant B

## MAIN CHARACTERISTICS OF DIVA COMPARED TO OTHER SINUS ELEVATION TECHNIQUES

Criterion \ Technology	Minimally invasive	Post-op side effects	Membrane safety	Time to restoration	Low residual bone cases	Sinus/membrane monitoring during & post procedure	Access and control during the procedure
Open sinus lift	X	X	X	X	X	X	X / V
Closed sinus elevation	V	V	X	V	X	X	V
Other closed/minimally invasive sinus lifts	V	V	X	V	V	X	X
<b>Divia</b>	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>

## THE DIVA KIT



DIVA Implant

### » Sizing information

» MMD	3.75	4.2	5
» Length	11.5	11.5	11.5
	13	13	13



Valve Screws



Internal Screw Driver



Cover Screw



Saline Syringe



Synthetic Bone Paste



IV Cannula

## >> Company Profile

- > **UpHeal Dental Ltd.** delivers advanced sinus lift solutions to the field of dentistry in Israel and worldwide. Our team of professional consultants is comprised of expert dental surgeons and headed by Prof. Oded Nahlieli.
- > **UpHeal Dental** is the owner of the rights to "DIVA" - Dynamic Implant Valve Approach - an innovative technology for sinus lifting. The DIVA is manufactured by PALTOP and is CE- and Israeli MOH-approved, holding patents in Israel, China, Russia and Australia; patent applications are pending in several additional states.
- > We maintain close relationships with our customers to ensure they receive the solution best suited to their needs, and continuously monitor our products, making adjustments and improvements when the field's requirements change.
- > UpHeal Dental aims to make the sinus lift procedure less complicated and more accessible to dental surgeons, and less traumatic for the patient. Consequently, we are always on the lookout for advanced, innovative high-quality products and services in this field.



**DIV<sub>A</sub>**  
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