Language EN

GIO Fill™

Cross-Linked Hyaluronic Acid Filler

SOFT Lidocaine

DEEP Lidocaine

VOLUME Lidocaine

ULTRA VOLUME Lidocaine

GIO Fill™

Cross-Linked Hyaluronic Acid Filler

G-Prime Integration Optimization

GIO

G-PRIME

GIO Fill™'s proprietary technology
overcomes the limitations of monophasic fillers
by achieving outstanding elasticity
and a high storage modulus (G').

Integration

The stable cross-linking of HA
and BDDE minimizes adverse reactions
while maximizing tissue integration.

Optimization

Built on over 20 years of filler manufacturing expertise,
GIO Fill™ is optimized
for superior rheological performance,
quality, and safety.

Core Technologies of GIO Fill™ to Achieve GIO

MGIT
Technique

HBCT
Technique

Precision Through Smoothness

MGIT Micro Grinding Irregular Technology

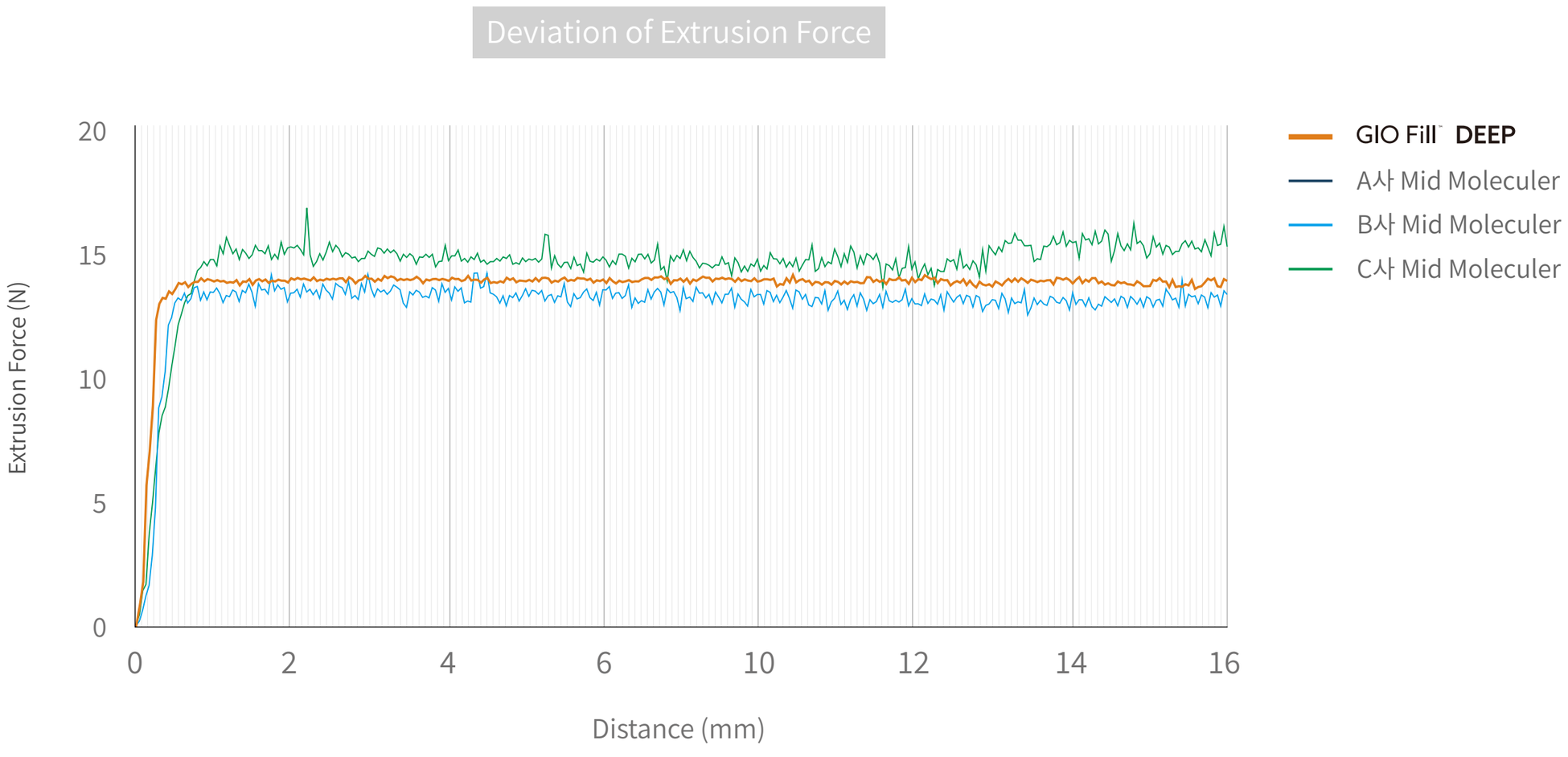
The **precision** of filler treatment
begins with the **processing of HA particles**.

GIO Fill™ is manufactured using **MGIT,**
a proprietary technology that refines hyaluronic acid particles
with micro-level precision, ensuring uniform and consistent processing.

Through MGIT technology,
GIO Fill™ delivers exceptionally **consistent extrusion force**,
maximizing both **practitioner convenience** and **procedural safety**.

- Consistent Extrusion Force
- Smooth Injection
- Reliable Injectability

Consistent Extrusion Force



Average 13.62(N) / GIO Fill™ DEEP (27G)
Experimental Data : Glenzen R&D Institute

With its highly precise syringe launch performance, GIO Fill™ rapidly reaches the optimal extrusion force immediately upon pressure application, enabling smooth and controlled injection from the very first injection site.

By maximizing the density of HA particles through MGIT, GIO Fill™ demonstrates superior injectability and stability, even when compared with other high-quality fillers.

Efficient & Stable 3D Hexagonal Cross-linking

HBCT

Hexagonal Block Cross-linking Technology

In HA fillers, increasing the degree of cross-linking **improves cohesiveness** but may increase **inflammatory responses**, whereas reducing cross-linking **minimizes thermal degradation** but **compromises cohesiveness**.

GIO Fill™ utilizes **HBCT** to cross-link HA into a **stable hexagonal structure**, achieving **maximum cohesiveness** and **stability** with a **minimal degree of cross-linking**.

The hexagonal cross-linking structure **slows degradation** both in vitro and in vivo, significantly improving **volume retention** and **longevity**.

- Stable three-dimensional hexagonal architecture for natural-looking volume.
- Minimal cross-linking reduces heat-induced deformation of hyaluronic acid (HA).
- A dense and uniform gel network with a highly regular structure enhances stability.
- Delayed in vivo degradation prolongs tissue-supporting effects.

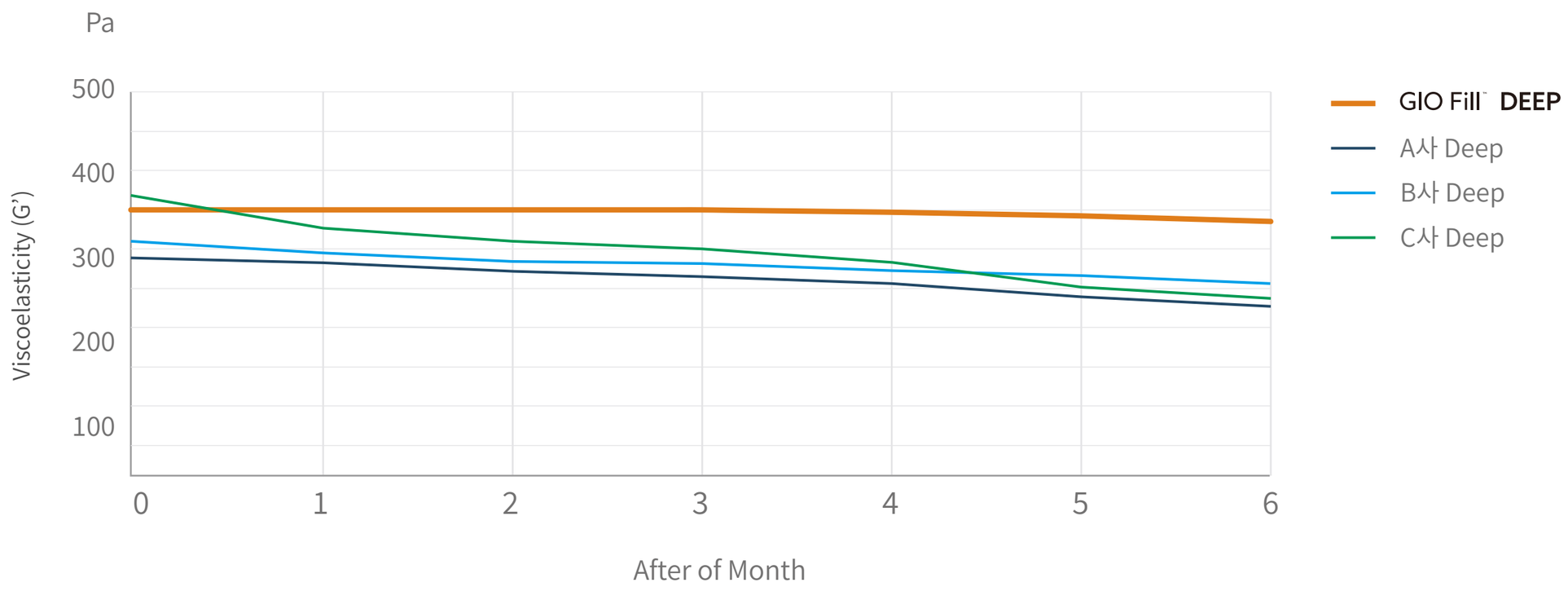
Balanced and Stable Hexagonal Cross-linking

Hexagonal Cross-linking	20-Hour Stabilization	Stable Cross-linking
HA is cross-linked in small, uniform blocks while maintaining consistent density in a parallel network.	A dense microstructure is formed, providing enhanced structural stability.	Cross-linking expands and reinforces the gel structure.

* SEM(Scanning Electron Microscope) 촬영본

Viscoelasticity Loss Below 3%

Viscoelasticity stability



Experimental Data : Glenzen R&D Institute

Manufactured using HBCT technology, GIO Fill™ maintains highly stable viscoelasticity (G') with less than a 3% variation, even after prolonged storage.

Superior Cohesiveness & Retention

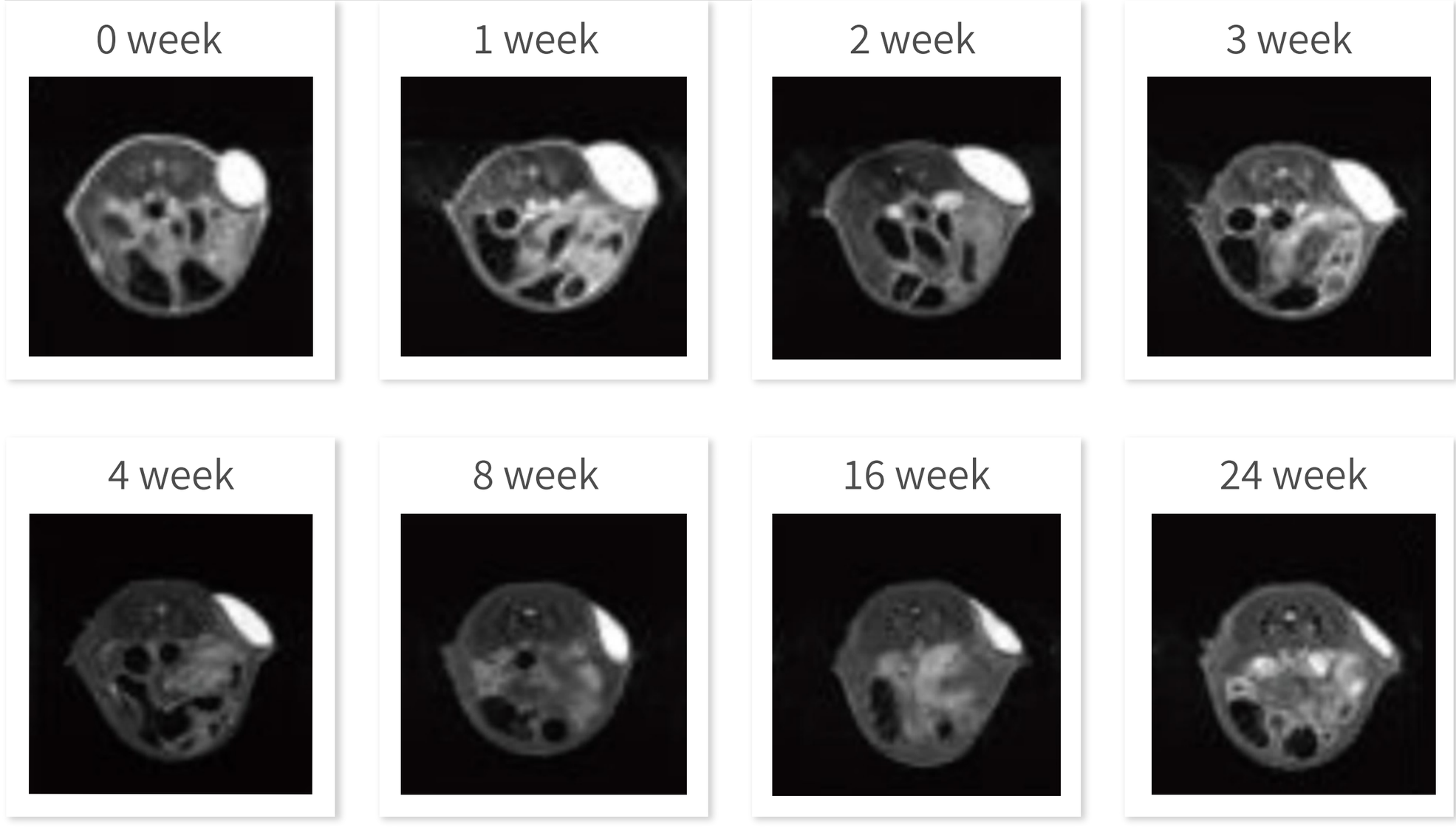
Cohesiveness test

GIO Fill™ SOFT	GIO Fill™ DEEP	GIO Fill™ VOLUME
2.4 cm	2.1 cm	2.0 cm

*Ref. data on Reanzen R&D

Excellent cohesiveness and retention minimize filler migration while preserving the intended treatment contour.

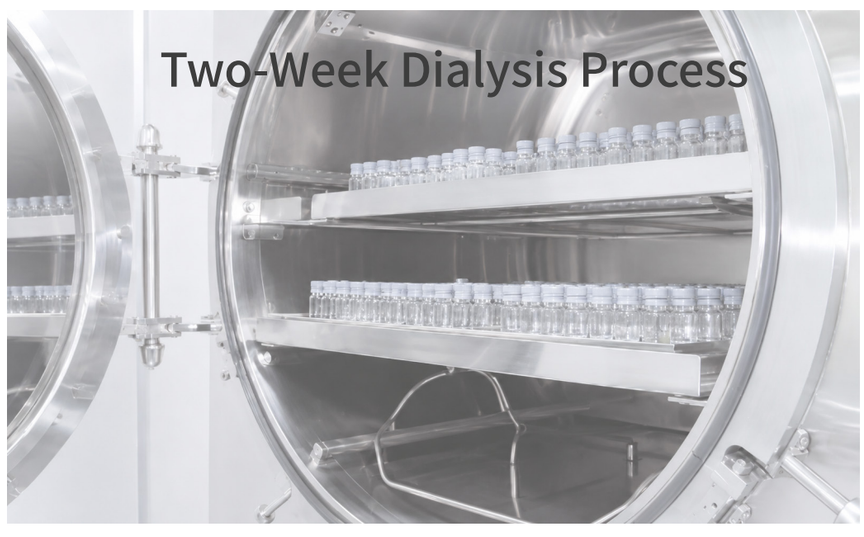
MRI Assessment of Filler Retention



Quality Evaluation

0.0 ppm of BDDE

- Real-time monitoring completely eliminates potential risks.
- A two-stage, two-week dialysis purification process reduces residual BDDE to 0.0 ppm.



Compliant with All Quality Standards

- Equipped with state-of-the-art manufacturing and analytical equipment.
- Strict quality management and assurance systems (GMP, ISO).
- Successfully passed biological safety testing.
- Complete removal of harmful impurities.

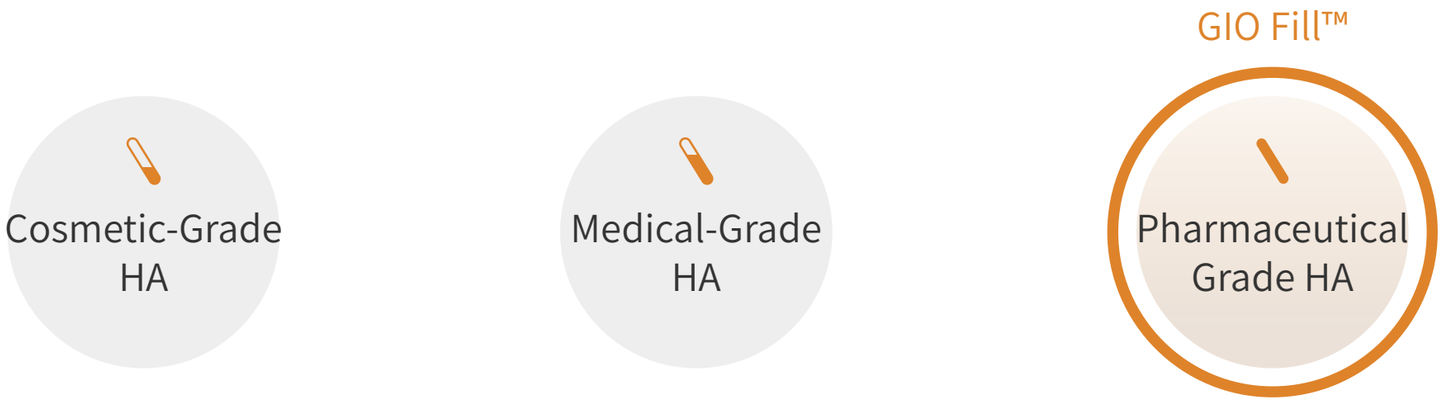
Developed through industry-leading R&D expertise, GIO Fill™ is manufactured under nationally certified quality control systems using advanced testing equipment, ensuring premium quality while maximizing wrinkle correction and volume restoration.

Cross-linking performed below 25°C prevents the formation of harmful by-products caused by thermal denaturation.

High-Purity HA Sourced from France

Pharmaceutical-grade, high-purity hyaluronic acid sourced from France ensures safety while minimizing adverse reactions.

Medical device-grade raw materials and aseptic manufacturing ensure strict endotoxin control.



- **Uniform Molecular Weight**
  Delivers predictable performance and consistent stability.
- **Stable Molecular Structure**
  Minimizes physical and chemical changes during manufacturing, ensuring consistent product stability.
- **Low Levels of Endotoxins & Proteins**
  Minimizes the risk of inflammation and allergic reactions associated with raw materials.

Ingredients Data Sheet

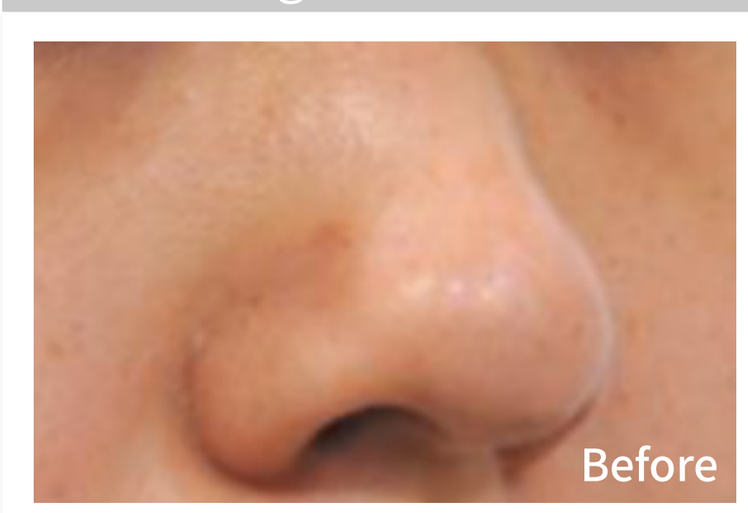
	Standard	GIO Fill™
HA Grade	Medical Grade	Pharmaceutical grade
HA Content	95.0-105.0% (104.3)	95.0-105.0% (102.8)
Protein	≤ 0.1% (0.05)	≤ 0.03% (0.01)
Heavy Metals	≤ 20 ppm (≤ 20)	≤ 4 ppm (< 4)
Bioburden	≤ 100 CFU/g (100)	≤ 20 CFU/g (5)
Endotoxin	≤ 0.04 I.U./mg (0.0015)	≤ 0.02 I.U./mg (0.020)
Residual BDDE	≤ 1.0 ppm	≤ 0.0 ppm

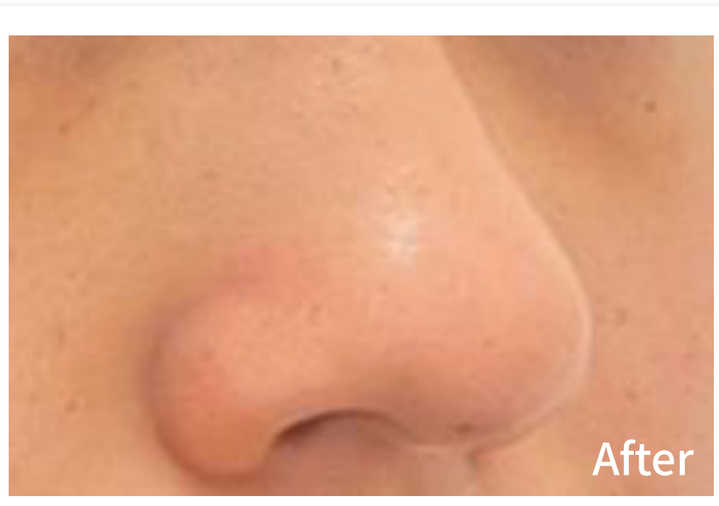
Products Data Sheet

Product Name	GIO Fill™ SOFT	GIO Fill™ DEEP	GIO Fill™ VOLUME	GIO Fill™ ULTRA VOLUME
Gel Type	Monophasic			
Crosslinked HA	24 mg/mL			
Lidocaine HCl	3 mg/mL			
Viscoelasticity	60 ~ 100 Pa	160 ~ 200 Pa	260 ~ 300 Pa	380 ~ 450 Pa
Extrusion Force	17 ~ 19 N	14 ~ 16 N	14 ~ 16 N	10 ~ 25 N
Needle Size	30G	27G	25G	25G
		T.S.K Premium Needle (Made in Japan)		
Volume	1.1 mL			
Packing (Carton)	1 Syringe, 2 Needle	1 Syringe, 1 Needle, 1 Cannula		
Duration	6~12 months	12~18 months		6~12 months
Crosslinking Agent	BDDE (1,4–ButaneDiol Diglycidyl Ether)			
Injection area	Shallow wrinkles	Deep wrinkles	Facial contouring	Deep wrinkles
Injection Depth	Dermis	subcutaneous	Deep subcutaneous	Dermis
Storage	2~25℃			
Expiry date	24 months from the date of manufacture			
Certificate	KFDA(Korea Food & Drug Administration) Approved. CE-MDR is scheduled			

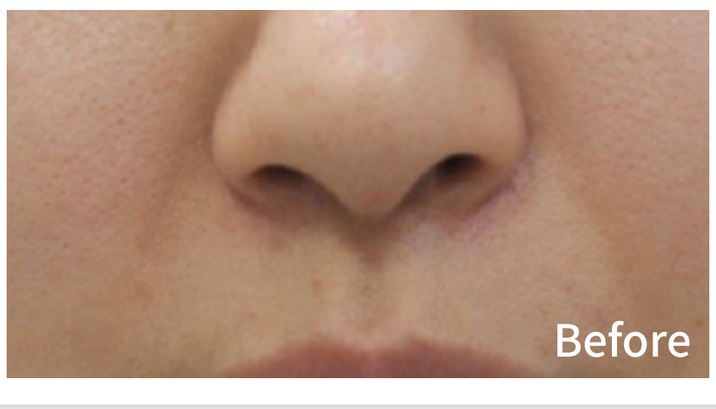
Before & After

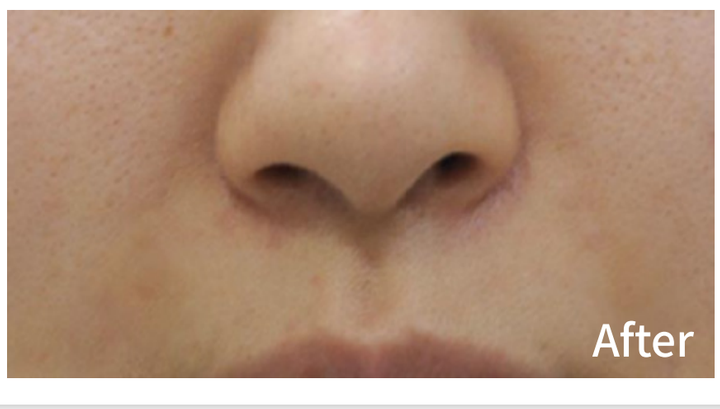
Nose Bridge Enhancement





Nasolabial Fold Correction





*Ref. data on Reanzen R&D

Treatment Areas

SOFT

Designed for superficial wrinkles such as crow's feet, neck lines, and glabellar lines.

DEEP

Designed for the correction of moderate to deep wrinkles, such as nasolabial folds, and for augmentation of the face, chin, and lips.

VOLUME

Its high viscoelasticity provides excellent structural support and volume retention, making it ideal for forehead and chin augmentation, deep wrinkle correction, and facial contouring.

ULTRA VOLUME

Featuring the highest viscoelasticity in the GIO Fill™ range, it is ideal for augmentation of the forehead, chin, and nose, as well as full facial contouring.

GIO Fill™

SOFT DEEP VOLUME ULTRA VOLUME

Composition

- Cross-linked Hyaluronic Acid — 24mg/mL
- Lidocaine HCl — 3mg/mL
- Phosphate-buffered saline — q.s.

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