



STARFILL INTRODUCTION



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Product Line-up

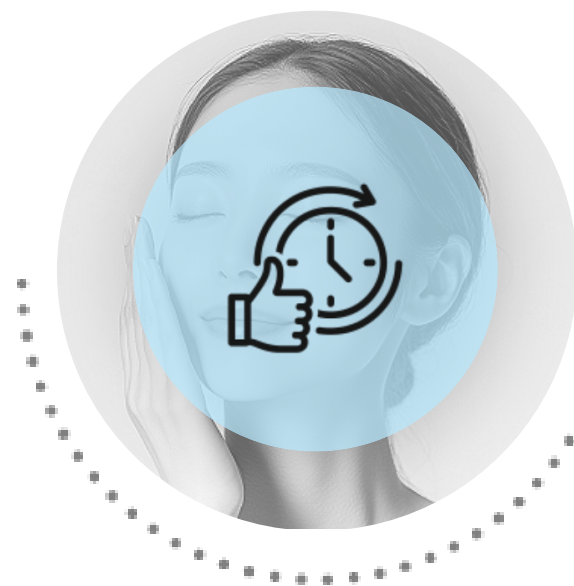
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Key qualities of an Ideal HA Filler

Balance of longevity, safety, precision, and ease - all in one syringe

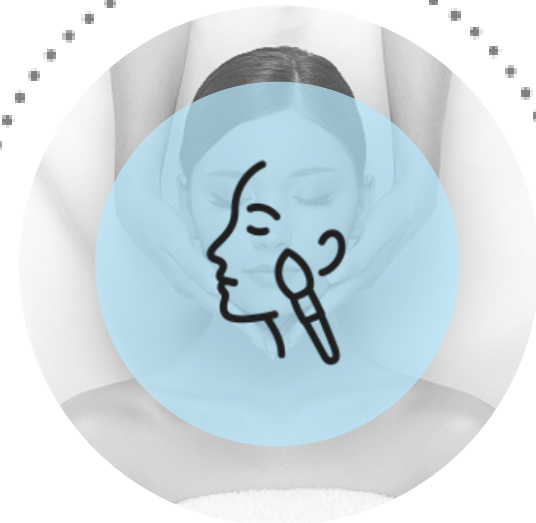
Long-lasting Results

- Durability
- Retention



Aesthetic Precision

- Symmetry
- Definition



Value Efficiency

- Affordability
- Performance



Clinical Safety

- Purity
- Reliability



Smooth Application

- Injectability
- Easy to Control





* Live Injection demo by plastic surgeon

Q. Why STARFILL? - Key Advantages

No. 1 Excellent lift & shaping **40%**

No. 2 Minimal BDDE & endotoxin **32%**

No. 3 Smooth injection **21%**

No. 4 Long-lasting effects **7%**

Excellent lift & shaping + Safer procedures + Doctor & patient 's satisfasction

Purity of Raw HA

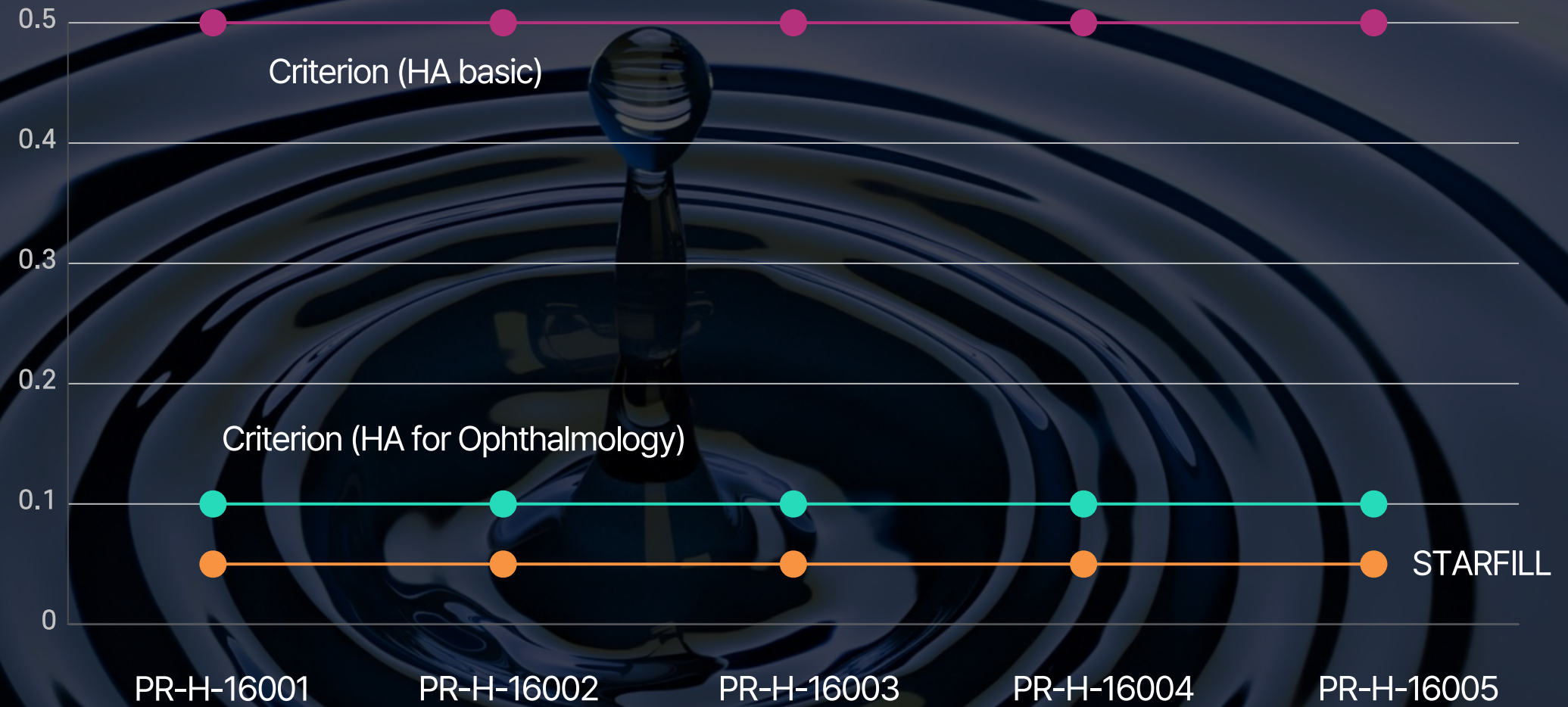
HA raw material for Starfill undergoes in-coming inspection at the factory

Each batch is carefully measured for compliance

It is managed to 0.5 EU/mg below European Pharmacopoeia (EP) standards

Purity of HA

(Measure : Endotoxin)



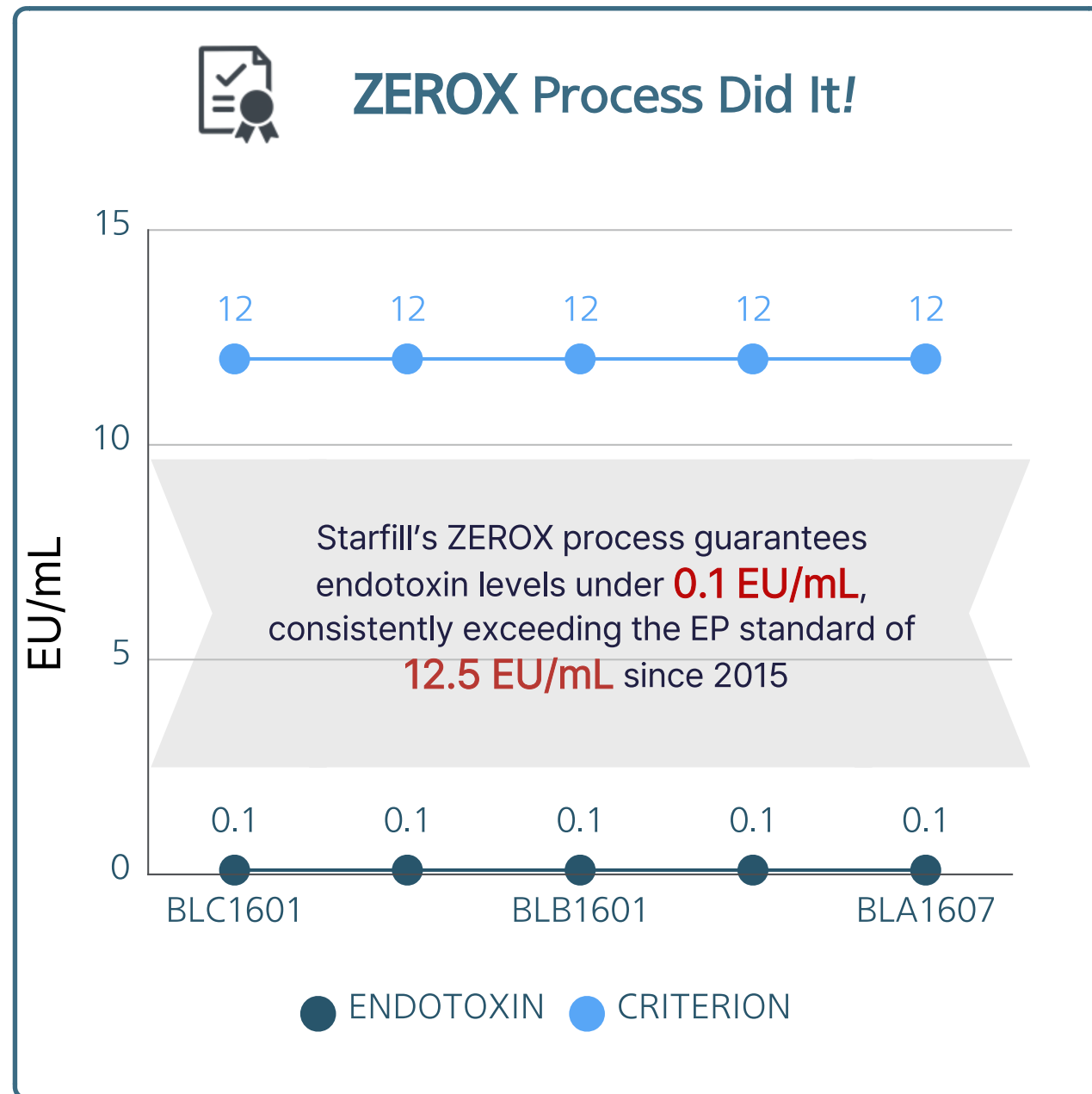
"Managed to 0.5 EU/mg below EP standards"

ZEROX TECHNOLOGY

ZERO ENDOTOXIN & RESIDUALS OPTIMIZATION EXCELLENCE

Minimized Endotoxins & Residual BDDE for Enhanced Safety

Starfill minimizes endotoxins (below 0.1 EU/ml) and reduces residual BDDE to nearly zero, thanks to our advanced "ZEROX" process (Zero Endotoxin & Residuals Optimization Excellence), ensuring minimal risk of injection-related side effects



What ZEROX can do ?

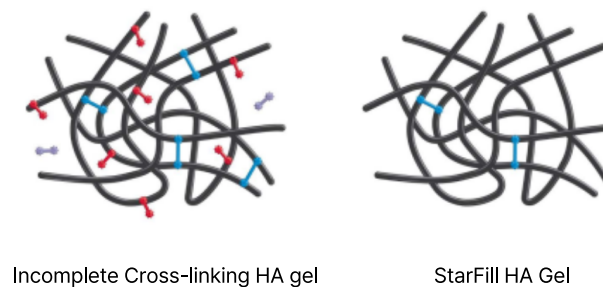


Minimize 2 side effects



"Starfill effectively reduces filler side effects through the ZEROX process"

Enhanced Cross-Linking



Through the improved cross-link process, the flexible[®]HIVE structure_® keep the stability for viscoelasticity of Starfill Plus, Deep Plus and Implant Plus. Ideal viscoelasticity shall lift up the tissue and make easy molding and maintain the natural beautiful shape

Quality Control

Endotoxin (EU/ml)

R	J	Y	C	P	B	T	P	E	S
< 0.5	< 0.5	< 0.03	< 0.03	< 0.5	< 0.5	< 0.1	< 0.096	< 0.05	< 0.09

Endotoxin criterion of STARFILL is less than 0.1 EU/ml
Current actual measured value : 0.03 EU/ml

BDDE (Protein Load) (µg/ml)

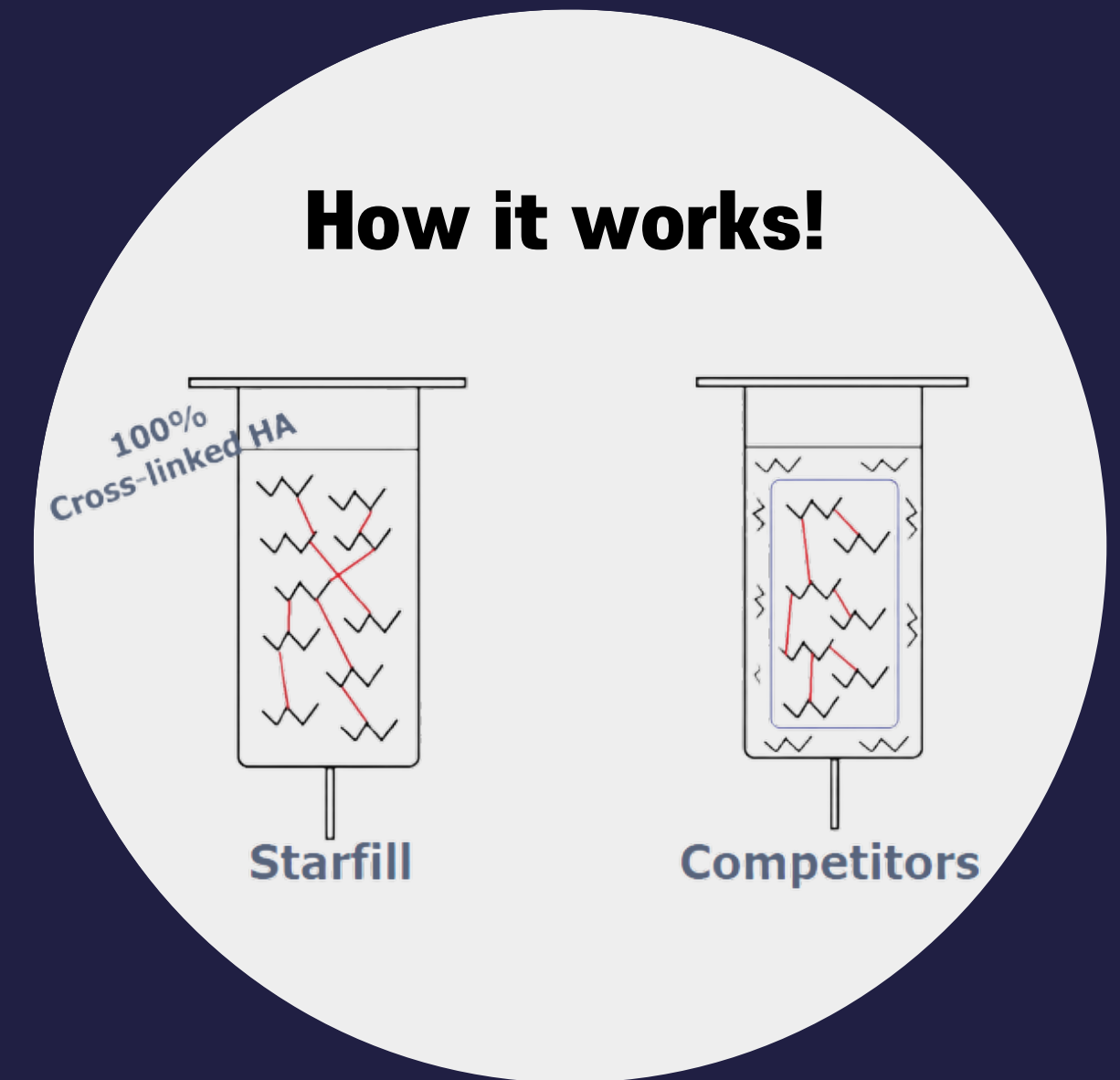
P	C	STARFILL
< 6	< 5	< 2.7

The legal permitted residual BDDE is less than 2ppm
But, STARFILL manages it as zero detection

Impact of HA molecular Size & Content



	Micro-molecular HA	Middle-molecular HA	Macro-molecular HA
EFFECT/ CHARACTERISTIC	Could cause inflammation and angiogenesis	Best condition for cross-linking reaction, ideal duration, and stability	May cause edema due to excessive water uptake
REFERENCE	Hyaluronic acid: A key molecule in skin aging (Dermato-endocrinology 4:3, 253-258; July-December 2012)	No specific reference provided	Influence of Molecular Weight on Swelling and Elastic Modulus of Hyaluronic Acid Dermal Fillers, Polymer (Korea), Vol. 39, No. 6, pp. 976-980 (2015)



Complex Viscosity

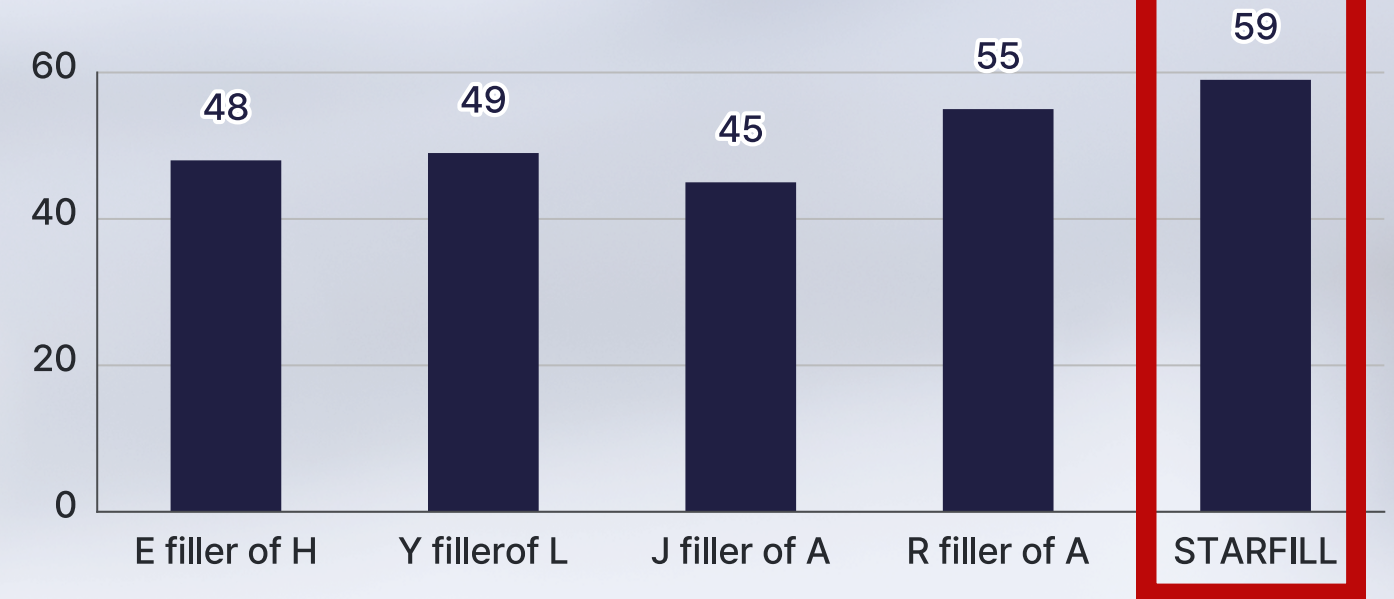
The Perfect Balance of "Viscosity" and "Elasticity" for Enhanced Performance

Competitor Product Comparison Table

Product	Pa.S
E Filler of H (Ultra Volume Plus with Lidocaine)	48
Y Filler of L (Volume Plus with Lidocaine)	49
J Filler of A (Ultra Plus XC with Lidocaine)	45
R Filler of A (Sub-Q Plus with Lidocaine)	55
"STARFILL Implant Plus"	59

The flexible "HIVE structure" keep the stability for viscoelasticity of Starfill Plus, Deep Plus and Implant Plus.

Complex Viscosity



Ideal viscoelasticity shall lift up the tissue and make easy molding and maintain the natural beautiful shape

Consistent Micro-particles



Implant Plus



M Company / N Product



A Company / J Product



L Company / Y Product

Gel morphology : particle of Starfill seems like dot on Shuttle Pix(P-400R Digital Microscope)

Homogenized Particle

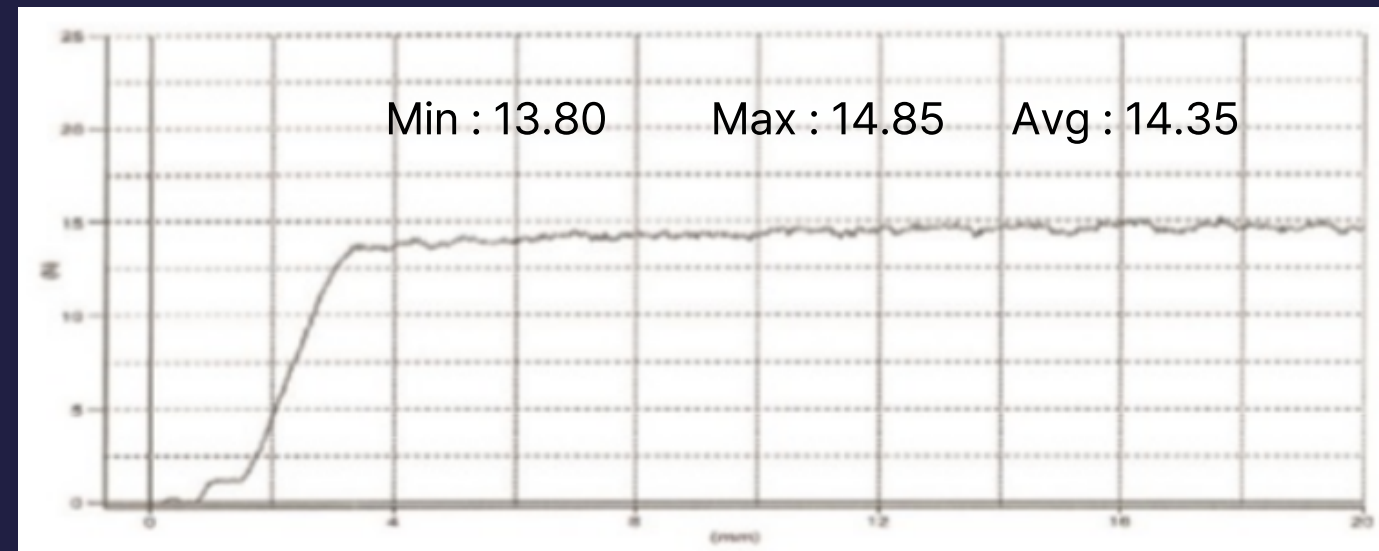
Leveraging Starfill's unique 'SILK Process*' technology, we create consistently homogenized particles for flawless, precise molding

Through SILK process of own technology, STARFILL is produced with the even particle size



*SILK Process - Smooth Injection & Levelled Kernel Process

Test result of injection pressure (calculation BLA1605)



Homogenized particles optimize Starfill's injection pressure, ensuring precision and enhancing procedure satisfaction

SILK PROCESS

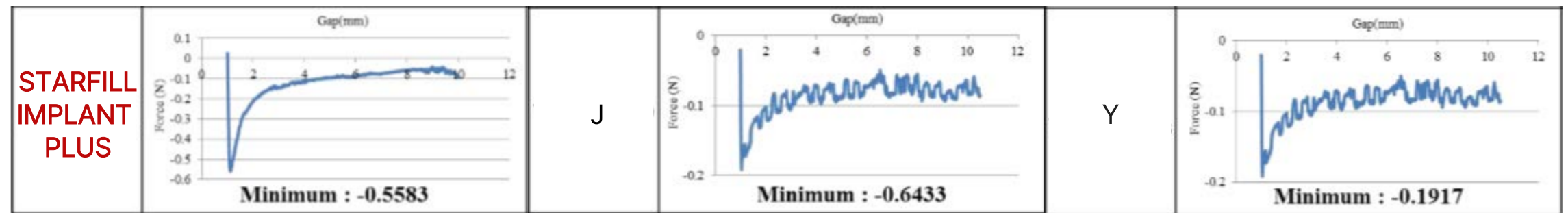
Consistent Micro-particles

Flawless, Precise Molding

Residual BDDE in fillers can lead to side effects such as swelling, allergic reactions, and even potential cancer risks. Minimizing BDDE levels is crucial for ensuring safer, more effective treatments

+ more ZEROX
**MINIMIZED
 MoD* LEVEL**

Sample	Starfill Plus	Starfill Deep plus	Starfill Implant Plus	A	B	C
MoD (%)	1.45	1.98	2.72	7.68	8.07	11.23



Data on CAU laboratory, Prof. Bjkim, 2017

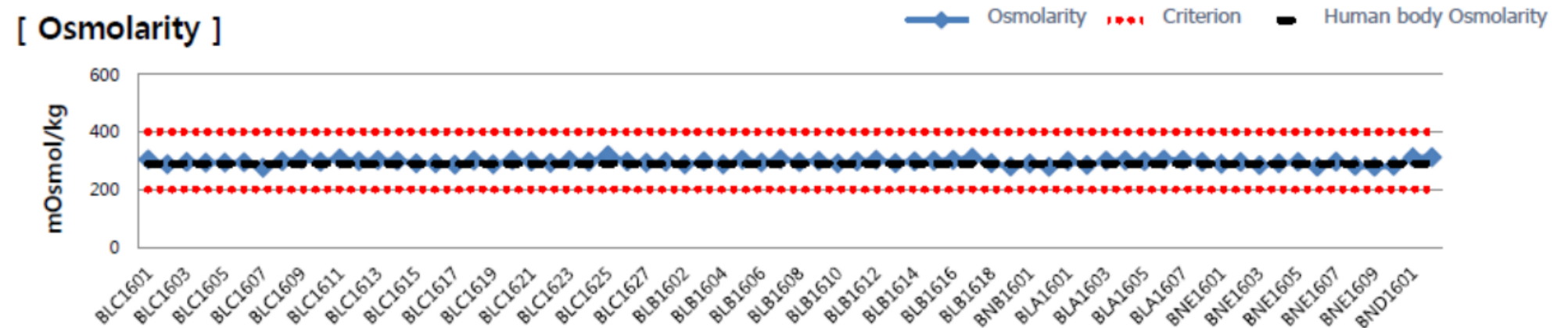
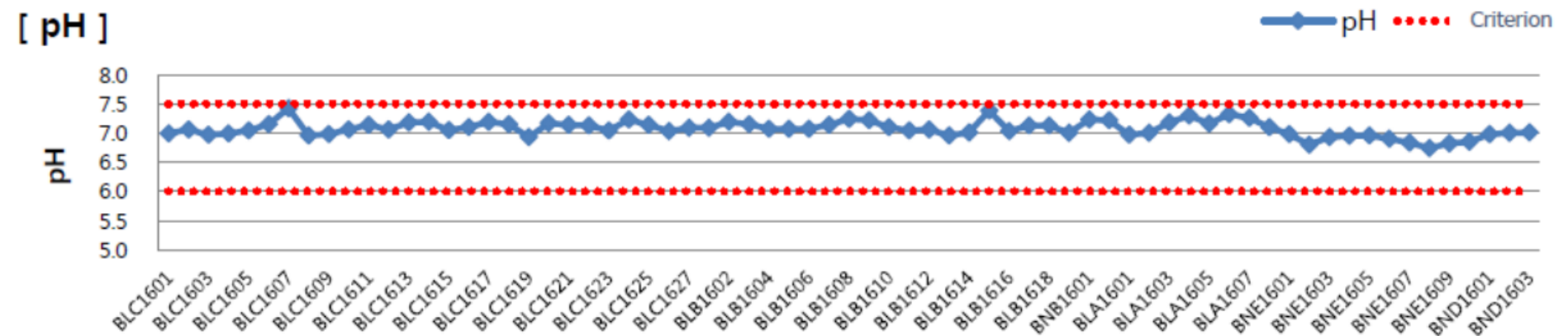
Starfill meets the highest safety standards with BDDE levels 25%–35% lower than competitors. Its cohesiveness, on par with J, ensures optimal lifting capacity, delivering exceptional clinical results (lifting capacity = cohesiveness x G')

* MOD (MODIFICATION OF DEGREE)
 SCALE FOR MODIFICATION OF HA BY BDDE

MOD = FULL CROSS-LINKED BDDE + PENDANT TYPE BDDE

+ more STARFILL SIMILARITY AS HUMAN BODY

Because STARFILL is produced as same pH as human body and osmolarity with 300 mOsmol / kg it shall reduce the pain and discomforts after procedure



When the pH and osmolarity of a filler match the body's natural levels, it enhances biocompatibility and minimizes discomfort. This leads to safer treatments, reduced inflammation, and more natural results

* THE NORMAL BLOOD PH OF A HUMAN IS BETWEEN 7.35 AND 7.45

** THE NORMAL PLASMA OSMOLALITY IN HUMANS RANGES FROM 280 TO 300 MOSM/L

Product Overview & Rheology

Product Name	Biomaterials to repair tissue [B04230.01(4)]
Registered Number	No. 17-203
Volume / Package	1 prefilled syringe (10.ml) * 2 needle / retail box
Storage	2~25°C keeping out of sunlight (Do not freeze)
Intended Use	Temporary improvement of facial folds
Operating Method	Please refer "IFU"
Single Use	Sterile medical device
Components	100% high purity hyaluronic acid filler
HA content	24mg
Type	Transparent viscous liquid



Product Overview & Rheology

Detail	Plus	Deep Plus	Implant Plus
Storage modulus (0.1Hz)	42.33Pa	130.52Pa	264.51Pa
Loss modulus (0.1Hz)	17.3Pa	37.32Pa	52.89Pa
Complex viscosity(0.1Hz)	72.78Pa.s	216.06Pa.s	429.31Pa.s
Phase angle	22.22	15.96	11.31
Tan delta	0.41	0.29	0.20
Osmolarity	280-330mOsmol/kg	280-330mOsmol/kg	280-330mOsmol/kg
Endotoxin	0.017EU/ml	0.009EU/ml	0.013EU/ml
BDDE	N/A	N/A	N/A
Modification Degree (MOD)	1.45	1.98	2.7
Pariticle size	310um	310um	310um
HA Ingredient	24 mg/ml	24 mg/ml	24 mg/ml



KEY BENEFITS

STARFILL'S PRODUCT INFORMATION



Non-Lidocaine			
	Plus	Deep Plus	Implant Plus
Composition	HA 24 mg / ml	HA 24 mg / ml	HA 24 mg / ml
Depth of Injection	Superficial / Mid dermis	Mid / Deep dermis	Subcutaneous / Superficial areas
Syringe	1.0 ml	1.0 ml	1.0 ml
Needle	27G, 30G	27G	25G, 27G
Shelf Life	24 months	24 months	24 months
Certification	KFDA / CE		



Lidocaine			
	Plus	Deep Plus	Implant Plus
Composition	HA 24 mg / ml Lidocaine 0.3 %	HA 24 mg / ml Lidocaine 0.3 %	HA 24 mg / ml Lidocaine 0.3 %
Depth of Injection	Superficial dermis	Superficial / Mid dermis	Subcutaneous / Superficial areas
Syringe	1.1 ml	1.1 ml	1.1 ml
Needle	27G	27G	27G
Shelf Life	24 months	24 months	24 months
Certification	KFDA		



Injection Area Guidelines for OPTIMAL RESULTS



💡 STARFILL "PLUS"
LIDOCAINE

➡ effective for
"lip volumize"



💡 STARFILL "DEEP PLUS"
LIDOCAINE

➡ effective for
"full-face volumize"



💡 STARFILL "IMPLANT PLUS"
LIDOCAINE

➡ effective for
"nose contouring"



Forehead volume
"restoration"

Under-eye area
"rejuvenation"

Cheek volume
"enhancement"

Lip "volumization"

Chin "contouring"

Real Assessment on Clinical Trial

Real Voices of Starfill Users: Satisfaction Survey Compared to Competitor Products

✓ Participant Self-Satisfaction Assessment

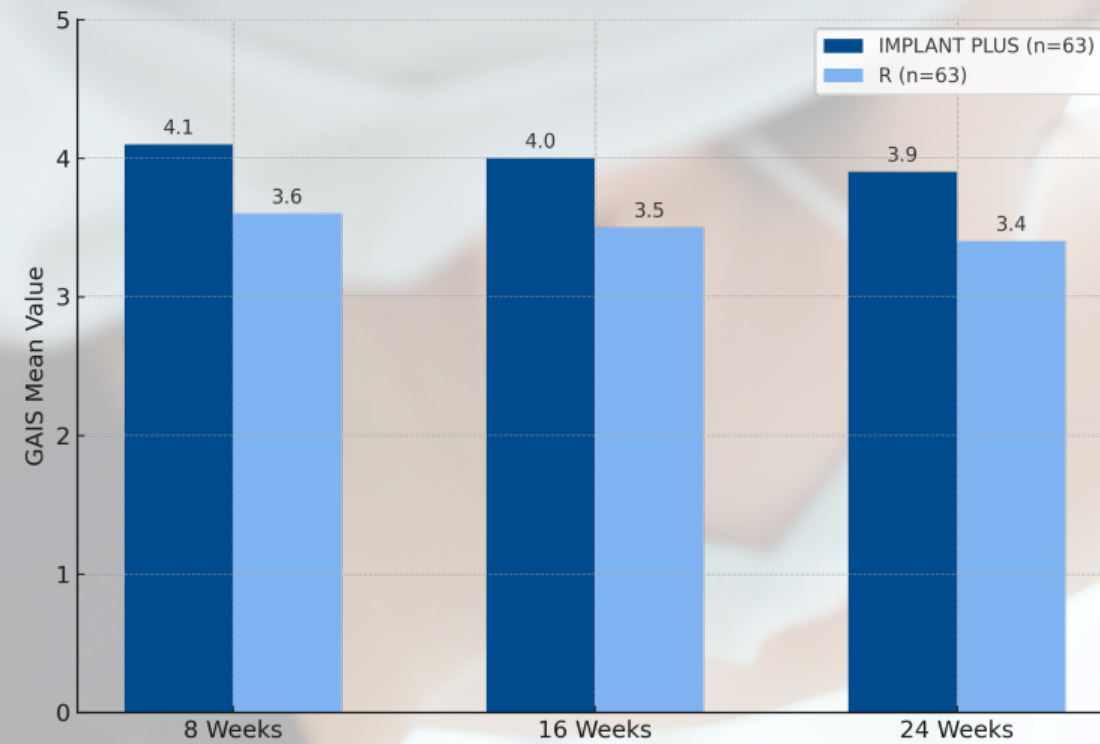


Figure 1. GAIS* mean values at 8, 16 & 24 weeks evaluated by subjects

*GAIS (Global Aesthetic Improvement Scale) Evaluation of satisfaction on the aesthetic aspect after treatment

Although there was no statistically difference in evaluating the satisfaction of the treatment with the tester and the subject's GAIS.

In general, the satisfaction level of the test group was similar or slightly higher than that of the control group

✓ Efficacy Assessment

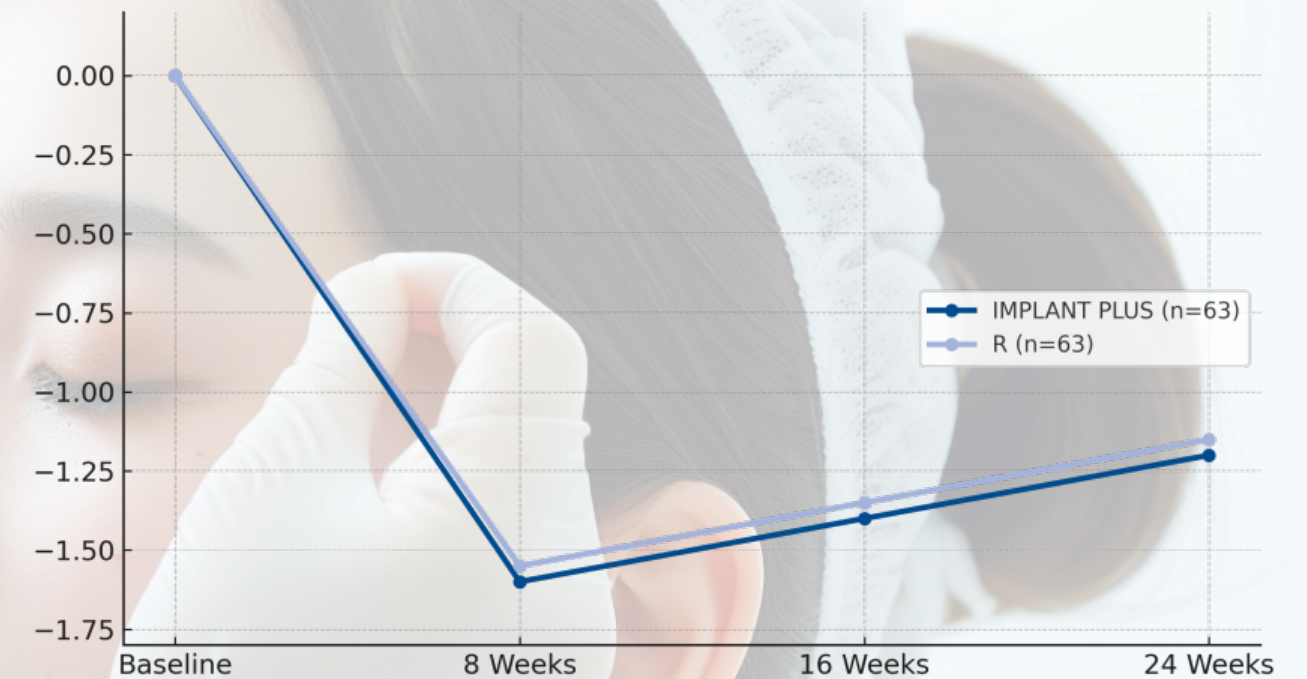
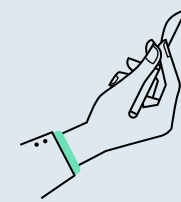


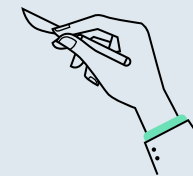
Figure 2. WSRS** mean value change at 8, 16 and 24 weeks compared to baseline assessed by blinded investigators

**WSRS (Wrinkle Severity Rating Scale)

From the WSRS (Wrinkle Severity Rating Scale) results (reduced compared to the baseline scores) evaluated by independent expert panels and blinded investigators, we were able to see the wrinkle improvement of the group



STARFILL REAL ASSESSMENT

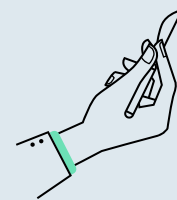


BEFORE & AFTER I

Real Patient Results: Before & After Treatment with Starfill

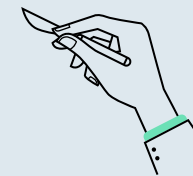


Before -----> 1 day -----> 1 month -----> 3 month



STARFILL REAL ASSESSMENT

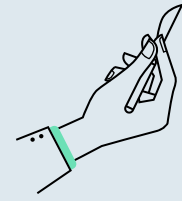
BEFORE & AFTER I



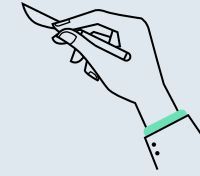
Real Patient Results: Before & After Treatment with Starfill



Right part : Implant Plus 0.9ml / Left part : Voluma 0.9ml
[Green is the difference in volume values in superimposition]



STARFILL REAL ASSESSMENT



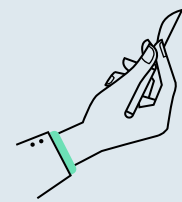
BEFORE & AFTER II

Real Patient Results: Before & After Treatment with Starfill

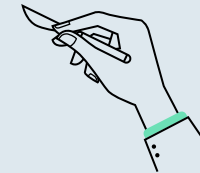


Before → 1 day → 4 month → 9 month





STARFILL REAL ASSESSMENT



BEFORE & AFTER III

Real Patient Results: Before & After Treatment with Starfill

BEFORE



AFTER

