

DON'T FILL, STIMULATE

# THE ILLA™

STIMULATE YOUR OWN COLLAGEN



**For Professionals**

This product is a medical device indicated for treatment of severe facial wrinkles and folds, replacement of volume defects, facial lipoatrophy and improvement of facial contour deformities. Before using **THE PILLAR™**, please read the "Instructions for use" thoroughly or consult with physicians.

# THE ILLA™

## STIMULATE COLLAGEN

As a safe and effective collagen stimulator, THE PILLA™ is an injectable and biocompatible medical device. THE PILLA™ helps to restore natural volume for aging skin lost collagen.

Poly L-Lactic Acid, the main ingredient is used for medical material over 20 years and confirmed safety by US FDA.

Injected THE PILLA™ (is made up of Poly L-Lactic Acid) to subcutaneous layer starts to stimulate the body's collagen production.

This increases the skin's elasticity and volume naturally and makes young looking. Depend on the condition of patient, 2 to 3 times of treatments are recommended to extend longevity of volume staying.<sup>1)</sup>

## PLLA COLLAGEN STIMULATOR Confirmed By Korean Ministry of Food and Drug Safety(MFDS)

THE PILLA™ is a collagen stimulator made of PLLA which is confirmed by FDA as a medical material.

Injected THE PILLA™ stimulates and generates collagen under the skin and restores volume for facial area. It naturally helps to reduce fine line wrinkles and present youth looking.

### THE PILLA™ Product Information

**Volume :** 365mg x 1 vial(5ml)

**Indication :** For treatment of severe facial wrinkles and folds, replacement of volume defects, facial lipoatrophy and improvement of facial contour deformities.

---

[Reference]

1) Aesthetic Surgery Journal 2018, Vol 38(S1) S13-S17

2) EC certified(as of 2021-03)

# Why THE PILLA™ ?

## Natural volume with longevity

Injected Poly L-Lactic Acid(THE PILLA™) restores volume through stimulating collagen in the skin layer.  
Generated volume with own collagen lasts more than 2 years.



### For Professionals

#### Convenient

#### Long lasting volume

#### Safe

Confirmed by Korean MFDS and achieved CE mark <sup>2)</sup>  
The main ingredient PLLA is biodegradable and biocompatible

#### Economic

Solution = THE PILLA™ + WFI(Water For Injection) + Lidocaine

#### Steady treatment over 20 years

The treatment for improving wrinkle with  
PLLA is being done over 20 years

#### Short treatment time



### For Patients

#### Natural result

The result will be shown gradually

#### Long lasting volume

#### Quick recovery time

With less downtime, easy to return to normal life

#### Economic

Less cost than other surgical treatments

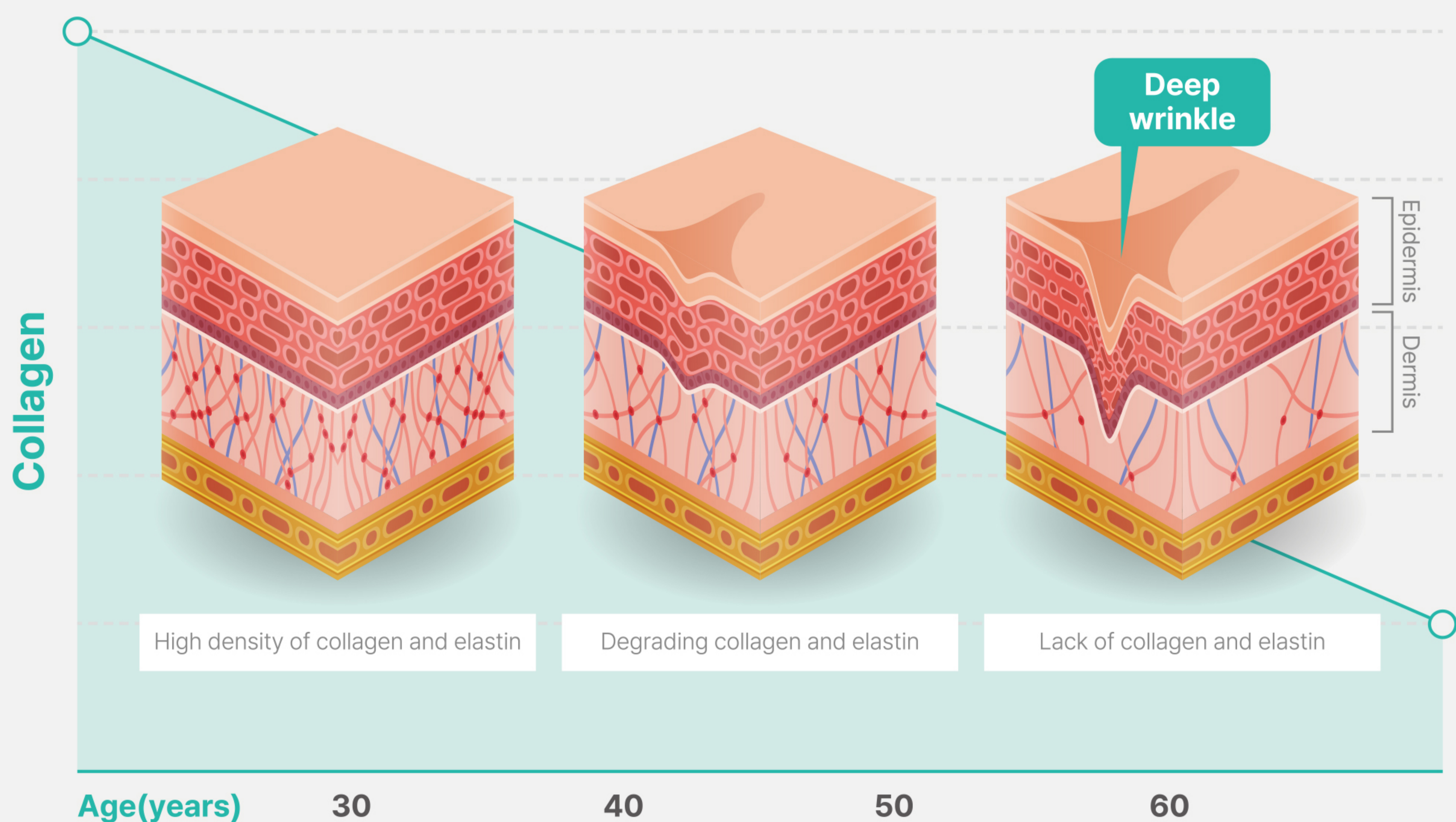
#### Volume Improvement & Restoration

Improvement of wrinkle through lost collagen renaturation

#### Short treatment time

# The correlation between Collagen & Skin aging <sup>3)</sup>

- The proportion of the collagen types in skin change with age. Young skin is composed of 80% type I collagen and about 15% collagen type III. With age, the ability to replenish collagen naturally decreases by about 1.0% - 1.5% per year.
- This decrease in collagen is one of the characteristic hallmarks associated with the appearance of fine lines and deeper wrinkles. [Picture 1]
- Moreover, deep inside in the dermis, fibrillar collagens, elastin fibres and hyaluronic acid, which are the major components of the extracellular matrix, undergo distinct structural and functional changes.



Picture 1. Collagen content in skin tends to increase until approximately the mid-20s. Thereafter, there is a progressive loss of collagen through the decades

The loss of collagen is clearly correlated with changes to **appearance attributes which are typically referred to as fines lines and wrinkles.**

[Reference]  
3) Reilly et al. Plast Aesthet Res 2021;8:2

# Benefits of THE PILLA™

## ✓ Hyaluronic Acid Filler vs THE PILLA™

- THE PILLA™ doesn't require retouching for every 6 months but lasts over 2 years after 3 times of initial treatment. After THE PILLA™ treatment, patients can able to ordinary daily life.

## ✓ Fat graft vs THE PILLA™

- THE PILLA™ is a non-surgical treatment and recovery time is shorter than fat graft. due to formation of biodegradable scaffold and generation of collagenesis, do not need to worry about engraftment of autologous fat.

	THE PILLA™	HA filler	Fat graft
<b>Surgical or non surgical</b>	Non surgical	Non surgical	surgical
<b>Key ingredients</b>	Poly L-Lactic acid (biodegradable)	Hyaluronic acid, (biodegradable)	Autologous fat
<b>Treatment time</b>	Within 10-13 mins	About 30 mins	About 2 hrs
<b>Indication areas</b>	Possible for both narrow, wide areas. *narrow area (nasolabial folds, nose, chin, forehead, frown, tear through, malar), *wide area(cheek, temple and etc.)	Mainly for narrow area (nasolabial folds, nose, chin, forehead, frown, tear through, malar)	Mainly for narrow area (cheek, whole face including temple)
<b>Duration time</b>	Over 80% maintains for 25 months. After 3-4 Initial injections, no need for additional injection for 2-3 years	Disappear during 6-8 months repeating treatments	Rapidly disappearing after a month and slows down disappearing in 1-2 years
<b>Adverse event</b>	Necrosis, blindness, edema	Necrosis, blindness, edema	Edema, bruise
<b>Feature</b>	Stimulate collagen generation	Induce collagen generation	Induce collagen generation

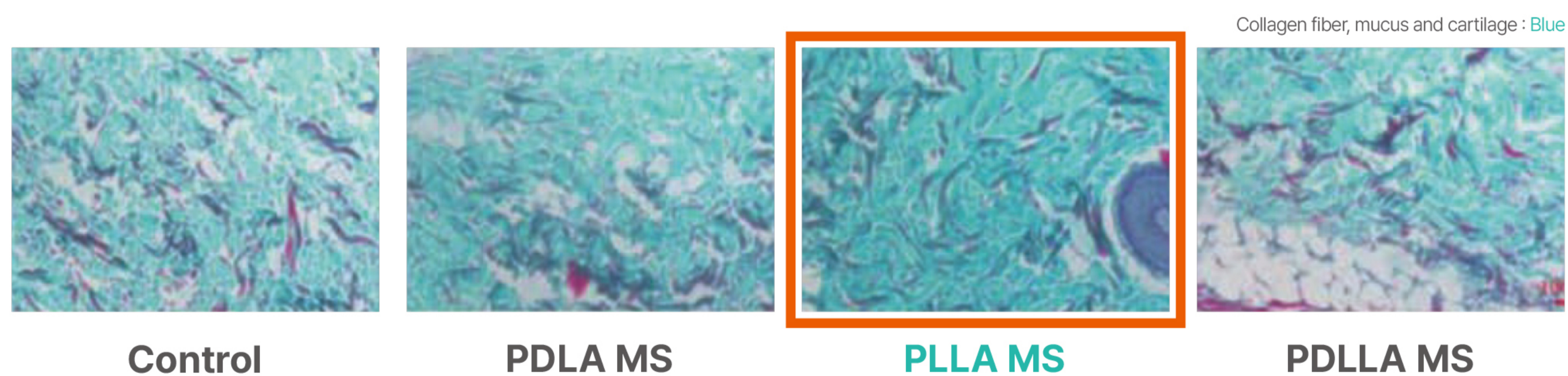
\* In general, patients may experience some degree of swelling because of the injection treatment itself. Because of this swelling, the injection sites may appear to be completely corrected immediately (within 30 minutes) after injections.

\* Patients should be informed that the swelling after the injection will be resolved within hours or days after injection, and that the injection sites will result in the original appearance before the injection treatment.

# THE **PLILLA**<sup>TM</sup> is Superior<sup>4)</sup> Collagen Stimulator

## ✓ The collagen density of **PLLA MS** group is higher than others<sup>4)</sup>

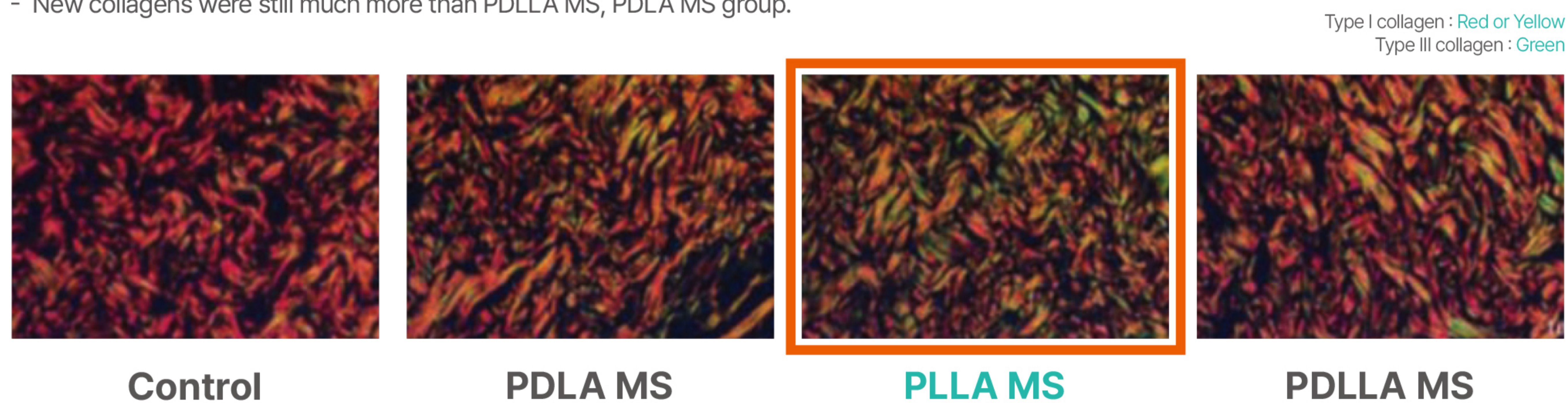
- The collagen density of PDLA MS and PDLLA MS group was significantly sparse than that of PLLA MS Group.
- PLLA MS has the most obvious effect on stimulating collagen regeneration, and it is indeed suitable for usage as dermal filler in comparison with PDLA MS and PDLLA MS.



Picture 2. Histological analysis of collagen regeneration. Picrosirius staining of the skin at the injection site of three kinds of PLA microspheres on Day 30

## ✓ PLLA form that is more effective for **collagen type I and III** production<sup>4)</sup>

- Specifically, type III collagen fiber was generated in PLLA MS group which was showing green in figure.
- New collagens were still much more than PDLLA MS, PDLA MS group.



Picture 3. Histological analysis of collagen regeneration. Masson staining of the skin at the injection site of three kinds of PLA microspheres on Day 30

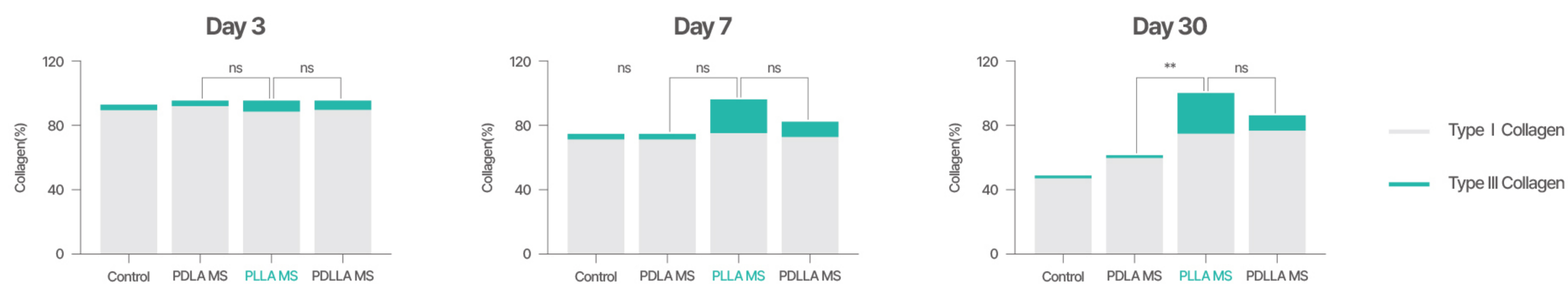


Table 1. Semi-quantitative analyses of type I and type III collagen fibers. Data are presented as mean ± standard deviation (n = 3; \*P < 0.05, \*\*P < 0.01, \*\*\*P < 0.001, ns: not significant)

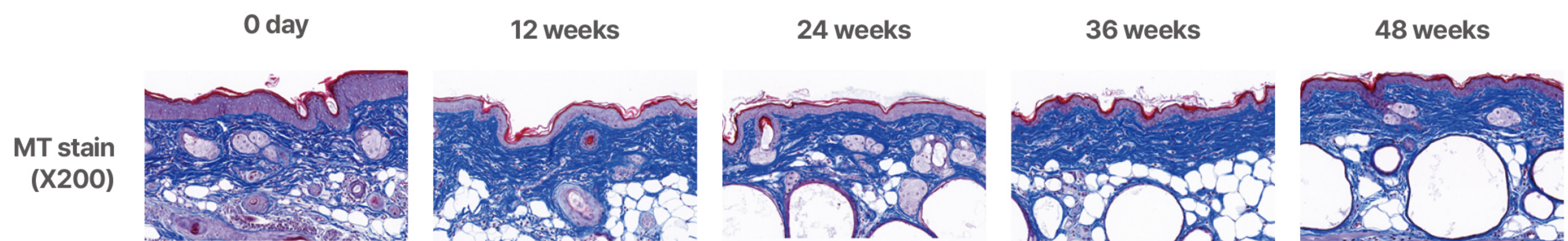
[Reference]

4) Chinese Chemical Letters 32(2021)577-582



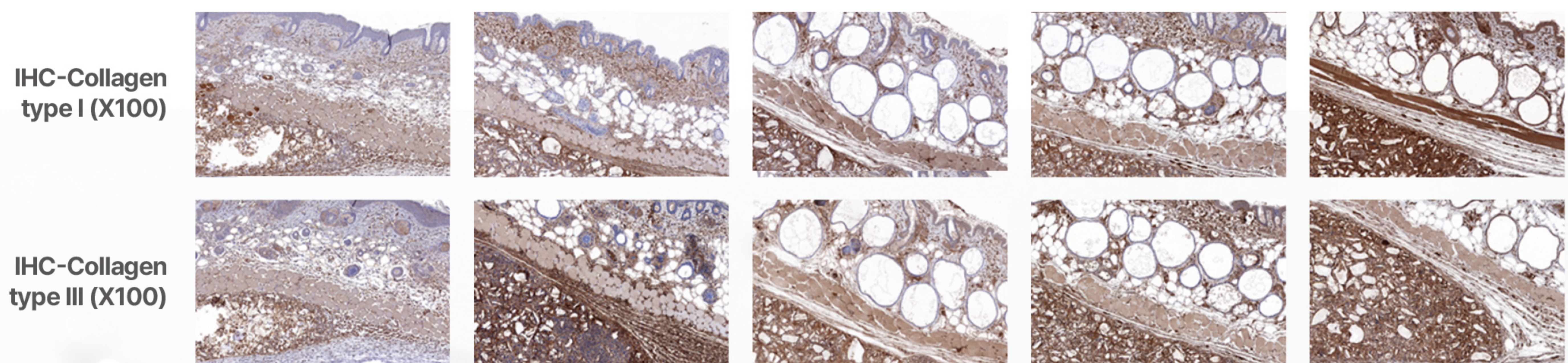
## Collagen production effect of THE PILLA™

- As a result of MT staining, it was confirmed that collagen was produced in both the test group THE PILLA™ and the company A product compared to the control after filler injection.



Picture 4. Collagen production over time after injecting THE PILLA™, MT stain(x200)

- As a result of IHC, it was confirmed that collagen type I and collagen type III expression increased compared to control after THE PILLA™ injection.



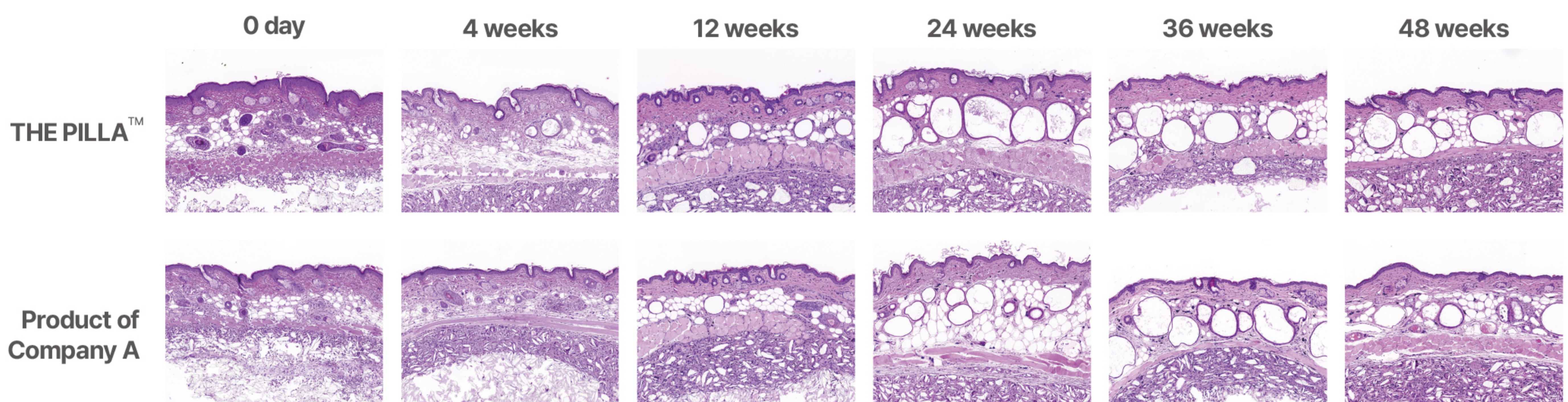
Picture 5. The expression of collagen type I and collagen type III over time after injecting THE PILLA™, IHC(x100)



# THE ILLA™ is Safe

## Safety of ingredients against foreign substances and inflammatory reactions

- According to histopathological evaluation results, fibroblasts migrate and proliferate between microparticles in both THE PILLA™ and Company A products from immediately after injection to 48 weeks. Multiple nuclei were observed and were read to improve from the inflammation degree of moderate (score 2) to the inflammation degree of mild (score 1) after week 4.
- The inflammatory and foreign body reactions of THE PILLA™ were **equally** or **safely** read compared to the licensed product of Company A.

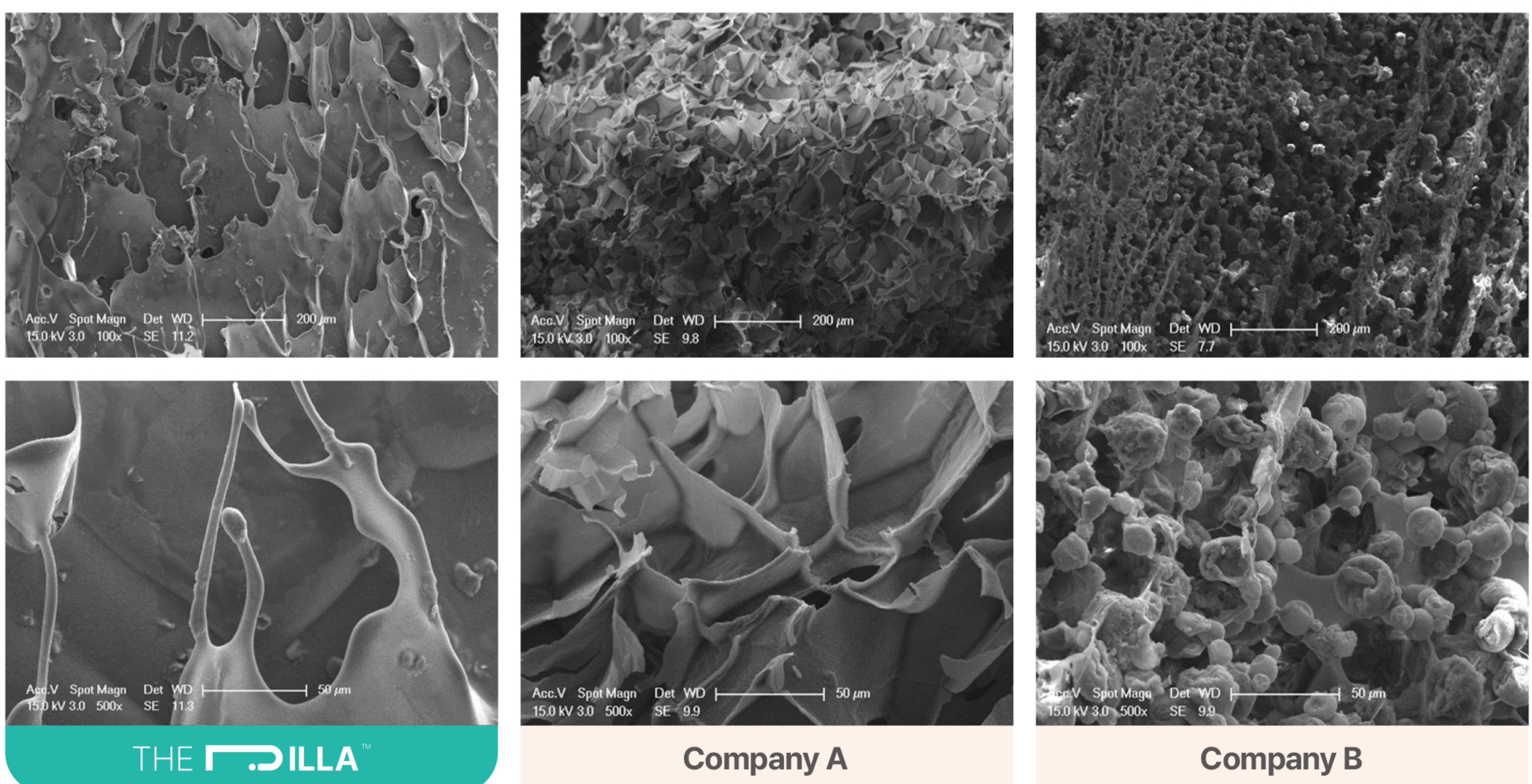


Picture 6. After injecting THE PILLA™ and company A product(bottom), check foreign substances and inflammatory response over time – H&E staining(x100)

## Particle Shape

- THE PILLA™ is Soft PLLA with a soft particle shape.
- The shape of the THE PILLA™ Granule powder is smooth and streamlined to reduce side effects.

SEM Microscopic photography x100(up)  
SEM Microscopic photography x500(down)



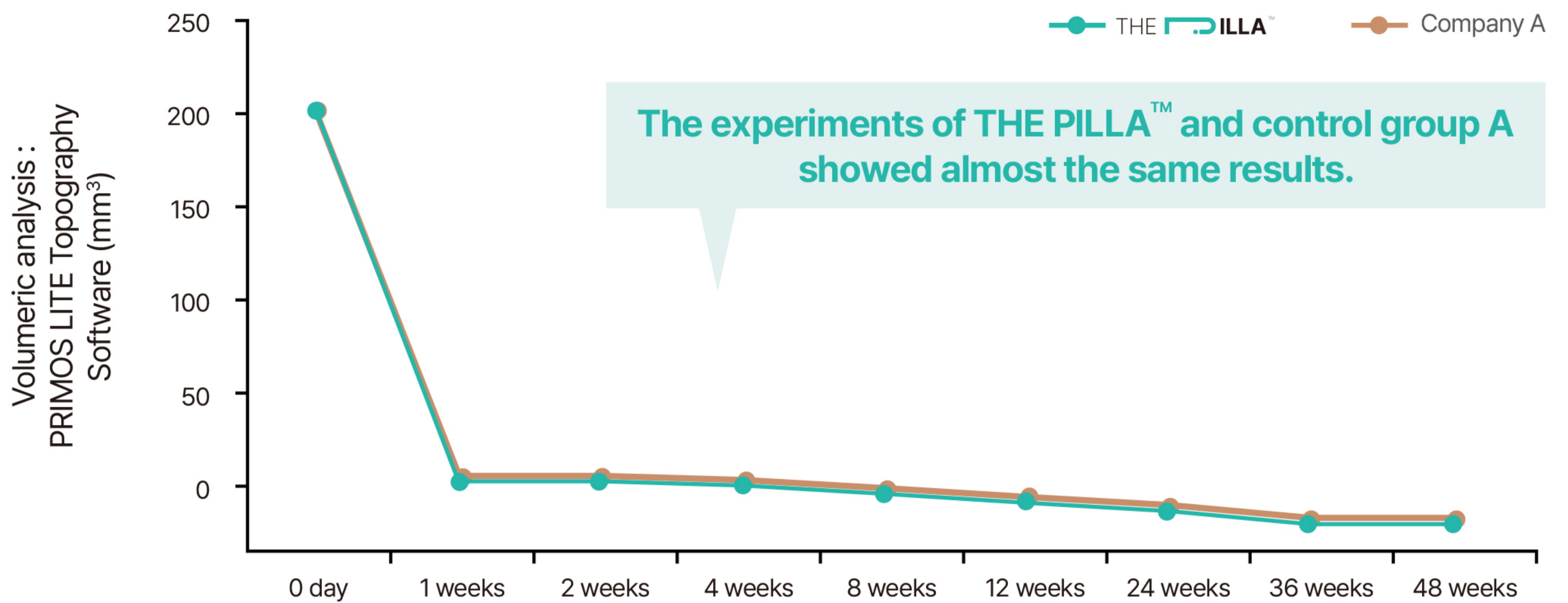
Picture 7. SEM Microscopic photography, solution form



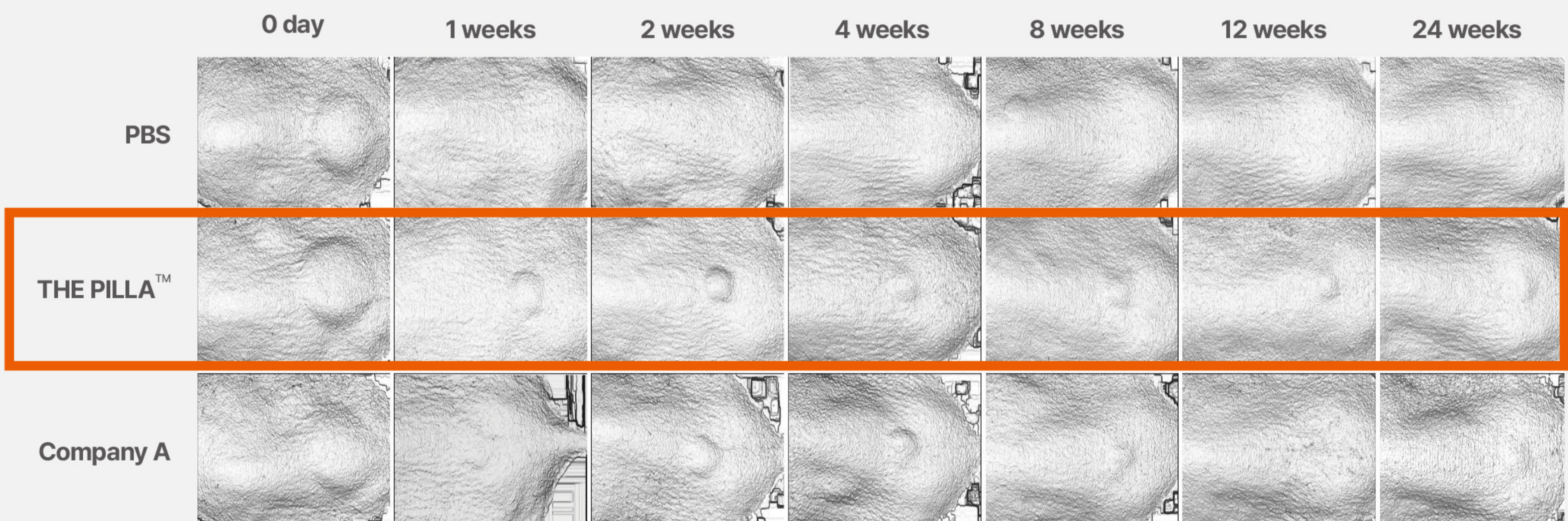


## Biodegradability

- THE PILLA™ showed a tendency to decrease gradually by week 36 after a sharp decrease in initial volume in week 1.
- The initial volume reduction is due to the absorption of the excipient in vivo, and the licensed product. Company A, and THE PILLA™, tend to be equivalent.



Picture 8. Relative volume change after THE PILLA™ injection



Picture 9. The change of initial filler volume; Volumetric analysis; PRIMOSLITE Topography (with Software PRIMOS 5.8) Clinical study of Jungang University Korea

# How THE PILLA™ works<sup>5)</sup>

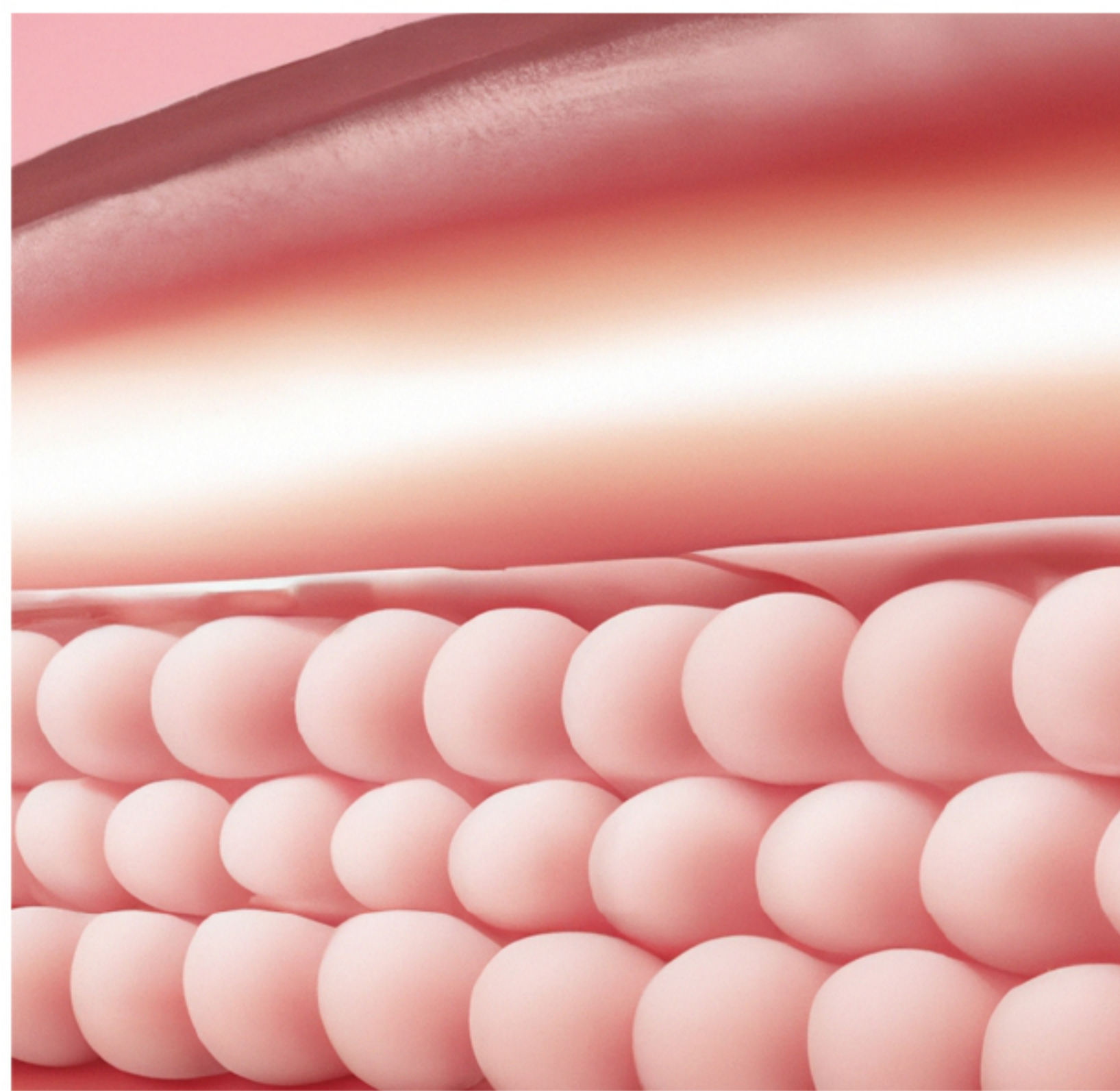
PLLA(Poly L-Lactic Acid), the main ingredient of THE PILLA™ is biocompatible and biodegradable synthetic polymer that has been used for sutures and other medical devices. Injected PLLA stimulates collagen generation, the volume gradually restored improves wrinkles.

## Mechanism of action



### STEP 01

Inject diluted THE PILLA™ into the subcutaneous layer of the skin.



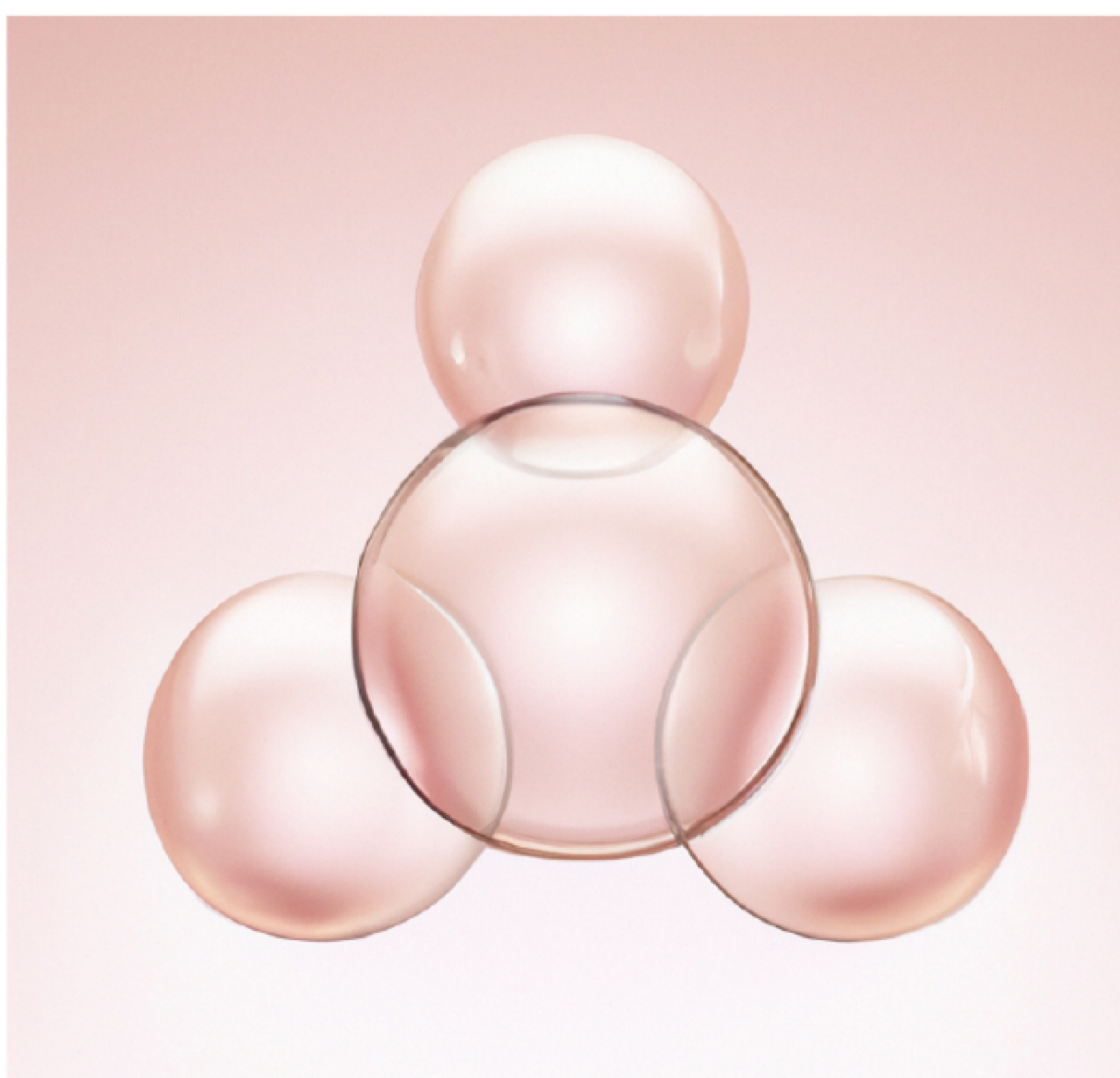
### STEP 02

Firstly wrinkle improvement can be shown with WFI(Water for injection) and diluted THE PILLA™.



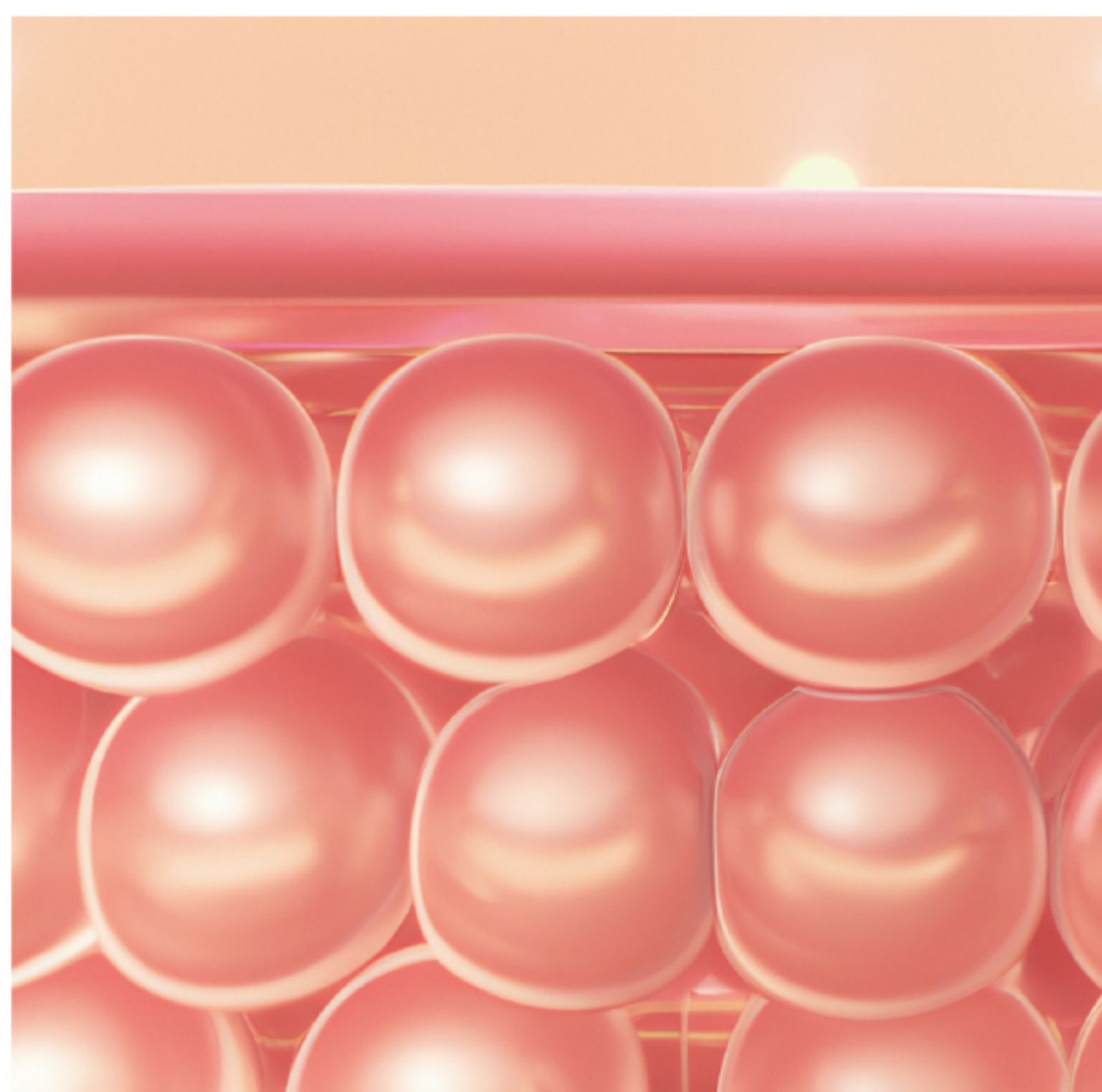
### STEP 03

Within a few days, after absorbing water, only THE PILLA™ particles left.



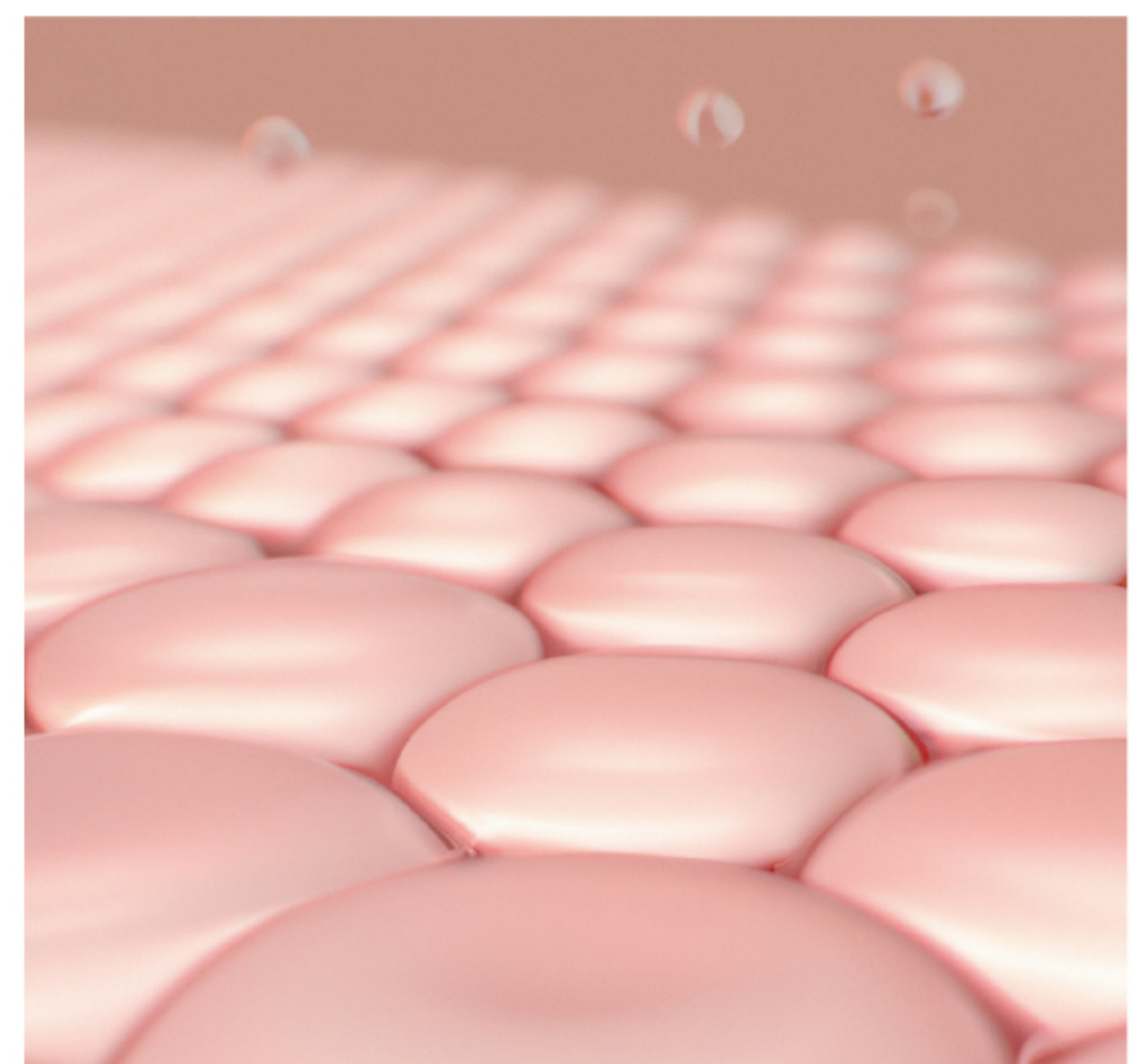
### STEP 04

New cells are gathered around THE PILLA™ particles and increasing fibroblasts.



### STEP 05

Increased fibroblasts stimulate collagen generation and improve skin folds.



### STEP 06

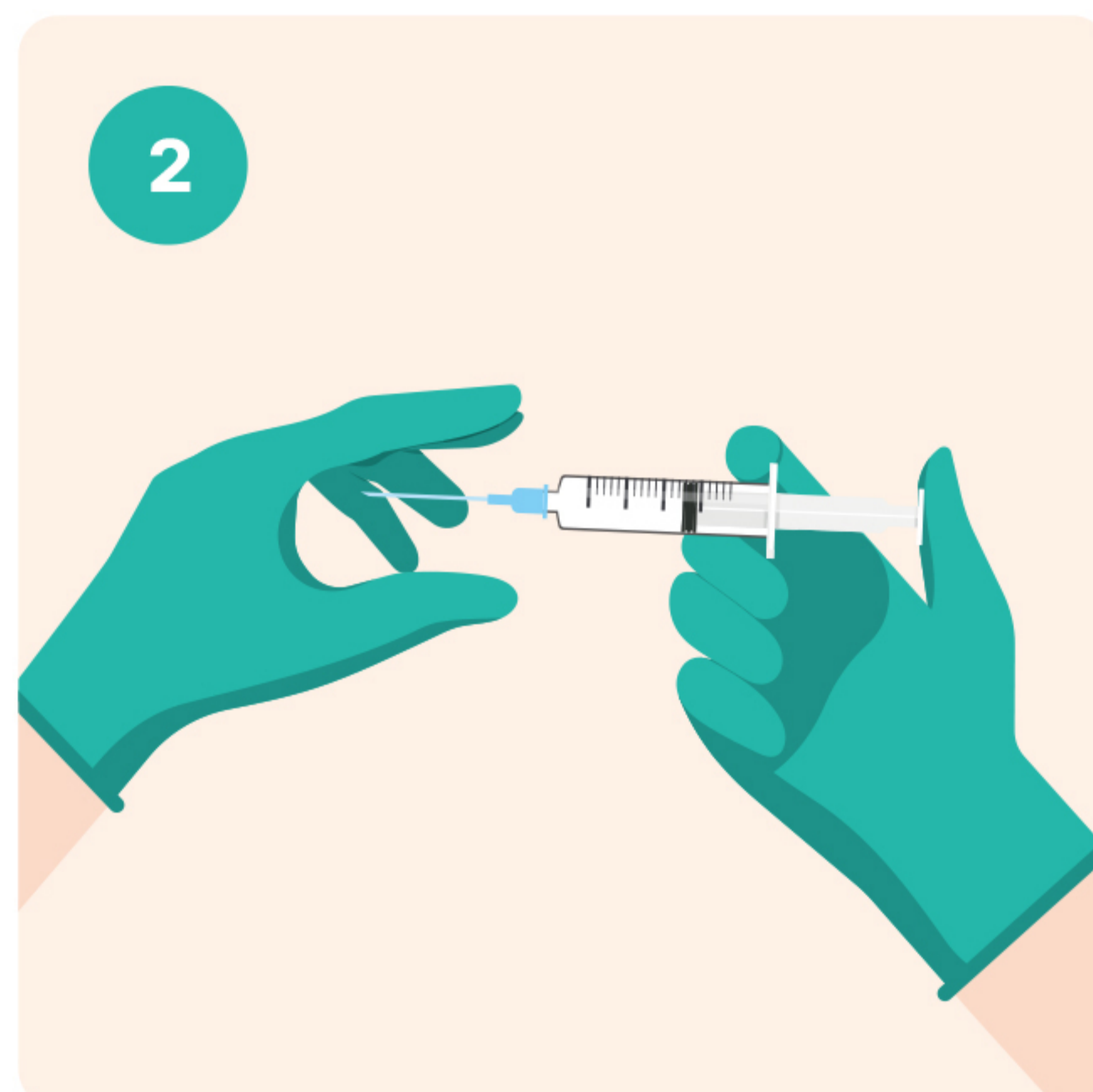
Generated collagen lasts for 2 years and THE PILLA™ particles are biodegraded.

[Reference]  
5) Facial Plast Surg.2009;25:95-99

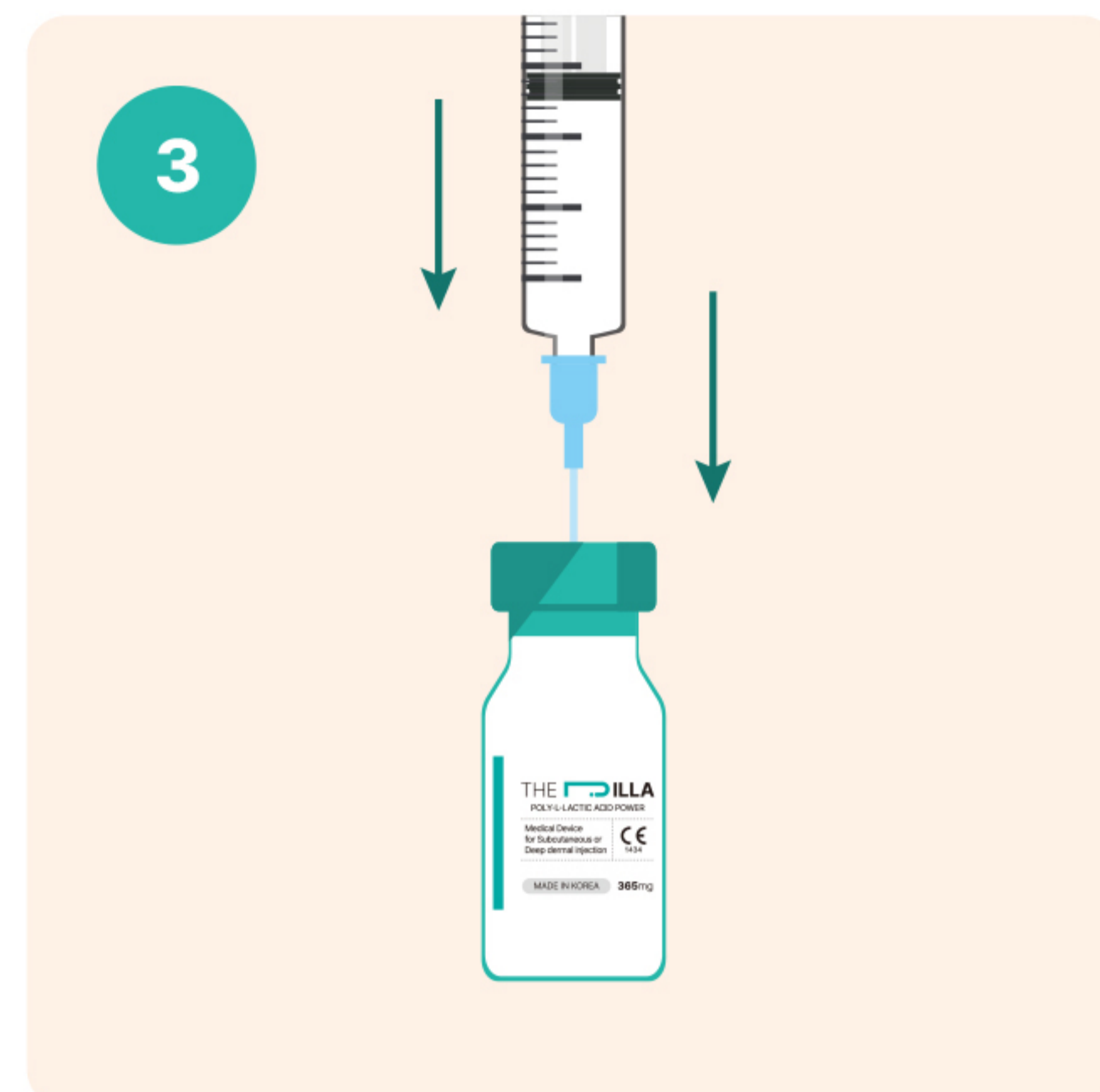
# THE ILLA™ Procedure



Remove the lid of the vial and wipe the rubber stopper of the vial with an antiseptic.



To produce suspension, connect 18G sterile needle to a 5ml sterile, single use syringe.



After taking the injection water with a 5ml syringe, insert the 18G injection needle into the rubber stopper of the vial at once and slowly inject the entire injection water into the vial containing freeze-dried powder.



Shake slowly for the first 5 minutes, then leave the powder unshaken for about 20 minutes to completely hydrate, and check the hydration condition.



When you are ready to inject the product into the patient, gently shake the vial to mix into a homogeneous translucent suspension.

※ The preparation solution should be injected into the patient within 72 hours of preparation, and unused preparation solution should be discarded within 72 hours.



Each time a patient is treated, wipe the rubber stopper of the vial with an antiseptic and use an 18 G sterile needle connected to 1 or 3ml disposable sterile syringe, to withdraw an adequate amount of suspension from the vial. At the time of treatment, use a 23G~26G sterile needle or sterile cannula depending on the case-by-case treatment purpose.

※ Do not store the dispensing solution in a syringe.

## Preparation TIP!

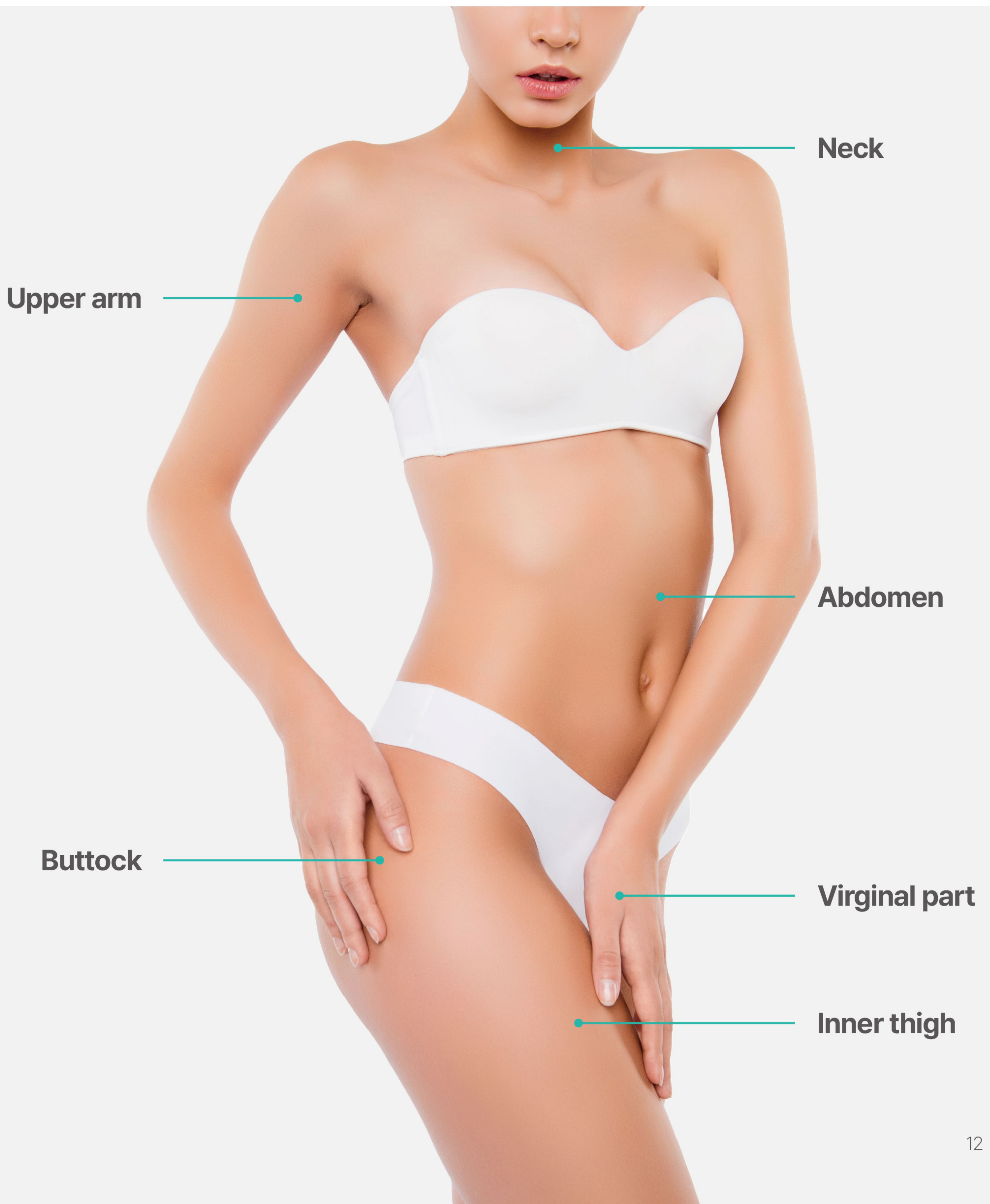
- Due to the nature of the PLLA, it is recommended to perform the procedure as soon as possible due to rapid sedimentation in the syringe.
- Dilution of non-cl HA by 1 to 2 cc instead of injection water can slow the rate of precipitation.

# THE **ILLA**<sup>TM</sup> Applications

## Face



 **Body**



# THE ILLA™ **After Care**



## 1. 5.5.5. Massage

After the treatments, massage 5 times a day for 5 minutes for 5 days.



## 2. Cooling pack

Using an ice pack to cool the treatment area helps reduce swelling and heat sensation.

\* However, avoid direct contact with the skin of the ice pack.



## 3. Things to avoid

Avoid drinking alcohol and smoking for 2~3 day.



## 4. Avoid sunlight

Do not exposure your skin to intense direct sunlight.

### Number of treatments and dosage

Number of treatments

**About three times  
on average**

Interval

**4~6 weeks**

Usage per session

**1~3 vials**

# THE ILLA™ Before & After



Age 48(Female) / 3 Month After / Number of Treatments : 3 / Treatment Interval : 1 Month / THE PILLA™ Usage : 1 Time 2Vials

MEDICAL DEVICE



**JOHA MEDITECH Co., Ltd.**

HQ. 10th Floor., 209 Bongeunsa-ro, Gangnam-gu, Seoul, 06109, South Korea  
BR. W-1205(Hyundai Terrace Tower), 7 Yeonmujaeng5ga-gil, Sungdong-gu, Seoul, 04782, South Korea

T. +82 2 2223 2129  
F. +82 2 2223 2130  
E. info@joha.co.kr  
W. www.thepilla.com | www.joha.co.kr

THE PILLA™ CE 1434

