

Belissima[®]

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 BELISSIMA, please read the "instructions for use" thoroughly or consult with physicians.



Belissima®

Elegant & Natural

As a safe and effective collagen stimulator, Belissima is an injectable and biocompatible medical device. Belissima 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 Belissima 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.

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

Belissima is a collagen stimulator made of PLLA which is confirmed by FDA as a medical material.

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

Belissima® 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 facial contour deformities



WHY Belissima?

Natural volume with longevity

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



For You

convenient

Long lasting volume

Safe

Confirmed by Korean MDFS and achieved CE mark.
The main ingredient PLLA is biodegradable.

Steady treatment
over 20 years

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

Economic

Solution
= Belissima + WFI(Water For Injection) + Lidocane

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

Volume Improvement
& Restoration

Improvement of wrinkle through
lost collagen renaturation.

Economic

Less cost than other surgical treatments

Short treatment time



How Belissima works

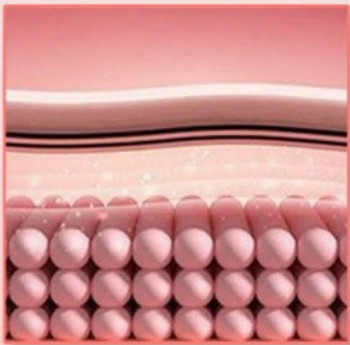
PLLA(Poly L-Lactic Acid), the main ingredient of Belissima is biocompatible and biodegradable synthetic polymer that has been used for sutures and other medical devices. Injected PLLA stimulates collagen generation, the volume gradually restored improves wrinkles.

Mechanism of action



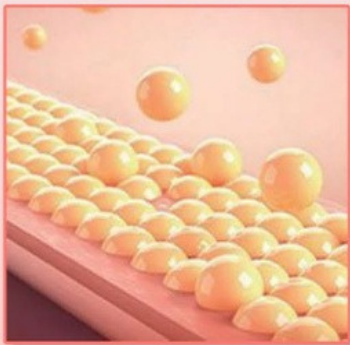
STEP 1

Inject diluted Belissima into the subcutaneous layer of the skin



STEP 2

Firstly wrinkle improvement can be shown with WFI(Water for injection) and diluted Belissima



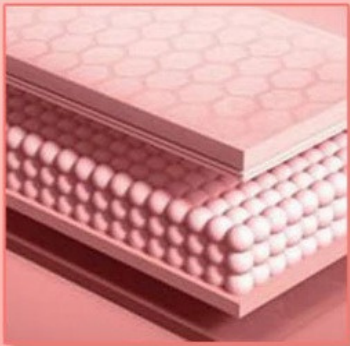
STEP 3

Within some das, after absorbing water, only Belissima particles left.



STEP 4

New cells are gathered around PLLA and increasing fibroblasts.



STEP 5

Increased fibroblasts stimulate collagen generation and improve skin folds.



STEP 6

Generated collagen lasts for 2 years and Belissima particles are biodegraded.

Procedure guide

Dilute with 8cc of normal saline (N/S), then gently shake for 1 - 2 minutes.

Before use, shake lightly again for another 1 - 2 minutes.

Transfer the solution into a 1 - 3ml Luer-lock syringe.

For optimal results, leave it at room temperature for 3 to 72 hours.

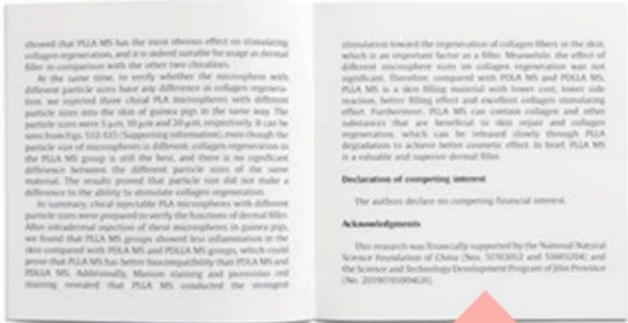
One vial (8cc) used on one side for full-face protocol



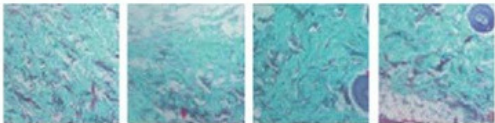
- A topical anesthetic is applied to the designated areas of the face.
- A 23-gauge needle serves as an introducer to create the entry point.
- A non-traumatic blunt cannula (23-25G, 50-70mm) is used for the procedure.
- If necessary, an infraorbital and zygomatic facial nerve block may be performed with 1% lidocaine and 1:100,000 epinephrine.
- It recommends injecting an average of 2-3 vials into the face.
- The injection sites and dosage are determined by the face size, volume loss areas, and severity.
- Additional treatments for the forehead, cheeks, and jawline can be included if needed.
- The procedure is recommended three times, with intervals of 4 to 6 weeks.

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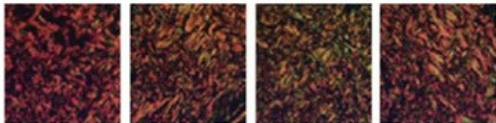
Superior collagen stimulator PLLA



Therefore, **compared with PDLA MS and PDLLA MS**, PLLA MS is a skin filling material with lower cost, lower side reaction, better filling effect and excellent collagen stimulating effect. Furthermore, PLLA MS can contain collagen and other substances that are beneficial to skin repair and collagen regeneration, which can be released slowly through PLLA degradation to achieve better cosmetic effect **In breif, PLLA MS is a valuable and superior dermal filler.**



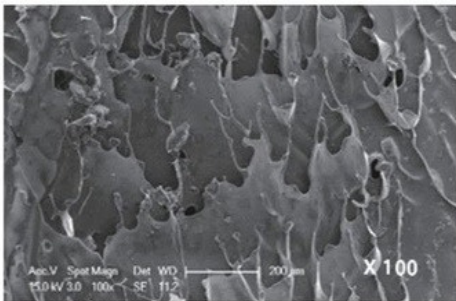
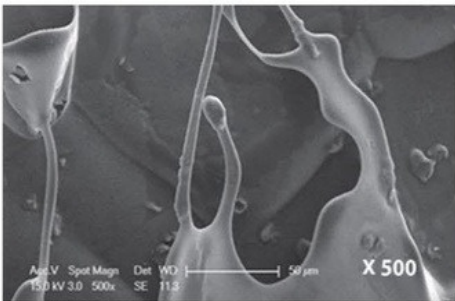
control PDLA MS PLLA MS PDLLA MS
collagen fiber, mucus and cartilage: Blue



control PDLA MS PLLA MS PDLLA MS
Type I collagen: Red or Yellow
Type III collagen: Green

Histological analysis of collagen regeneration. (A) Masson staining and (B) Picrosirius red staining of the skin at the injection site of three kinds PLA microsphere on Day 30. Type I collagen fibers are red or yellow, type III collagen fibers are green.

Safe Collagen stimulator PLLA



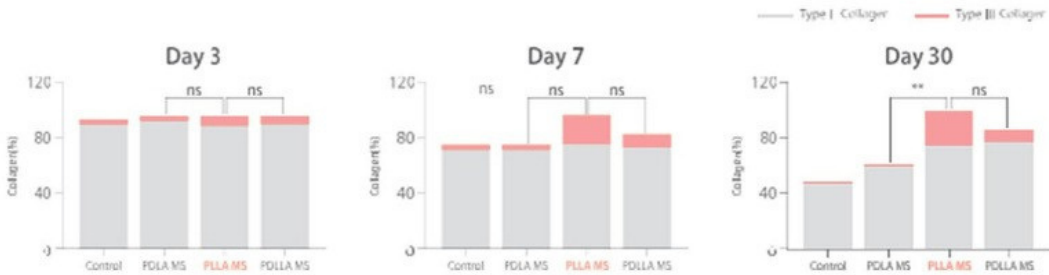
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inflammatory response shortly after the injection, while the inflammation was decreased or disappeared on Day 7 or Day 30 (Figs. 36 and 37 in Supporting information). Nevertheless, due to the rapid degradation rate of PLLA MS, a large number of PLLA MS were degraded and absorbed in the skin tissue on Day 30, which could not guarantee the long-term effect. And PLLA MS was easy to cause redness and swelling due to the strong inflammation after injection, the strong inflammation was not conducive to recovery which was a major disadvantage of PLLA as a filler.

Collagen fibers are the most widely distributed fiber in connective tissue. In order to evaluate the effect of chiral PLA microsphere on collagen regeneration, collagen in the sections were observed under the optical microscope. Masson staining is an authentication and classic technique for the staining of collagen fiber. It is frequently used in the analysis of collagen and smooth muscle. Collagen fiber, muscle, and cartilage were stained blue, and lymphatics, muscle, collagen, and glia were stained red. Nucleus was stained blue purple (25). By using picric acid red staining, different types of collagen fibers can be distinguished according to their specific forms and distinct colors under polarized light. For example, type I collagen fibers are densely arranged showing red and yellow colors, while type III collagen fibers exhibit threadlike structure in green color (26). As shown in Figs. 38 and 39

(Supporting information), on these days and seven days after injection of microspheres, the collagen fibers were arranged neatly and densely, with no significant difference among the three groups. However, on Day 30, the collagen fibers in the control group were densely and sparse, and the collagen loss was very serious. On the contrary, the collagen fibers in the PLLA MS group still remained normal arrangement. Meanwhile, the collagen density of PLLA MS and PDLLA MS group was significantly sparse than that of PLLA MS group. Nevertheless, the results of PLLA MS group stimulation of collagen regeneration were better than that of PDLLA MS group (Fig. 40). Similar results were shown in optical photo of tissue sections stained with picrosirius red. Three days after injection, a large amount of type I collagen fibers (red and yellow) were observed in all the groups (Fig. 40 in Supporting information). On Day 7, collagen fibers turned darker and sparse. Specifically, type III collagen fiber was generated in PLLA MS group which was showing green in Fig. 40 (Supporting information). This difference was enlarged on Day 30, when new collagen was still much more than those in PLLA MS and PDLLA MS group (Fig. 40). The content of type I collagen in the PLLA group was still 84.7%, and type III collagen was 15.1%. Total of type I and type III collagen were 1.4 times than the collagen in the PDLLA group, and 1.1 times than the collagen in the PDLLA group (Fig. 4C). Which showed that **PLLA MS has the most obvious effect on stimulating collagen regeneration, and it is indeed suitable for usage as dermal filler in comparison with the other two chiralities.**

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



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