AB Life

Si Belle

PLLA380+

PLLA + hyaluronic acid + mannitol

200 mg

Poly-L-lactic acid

80 mg

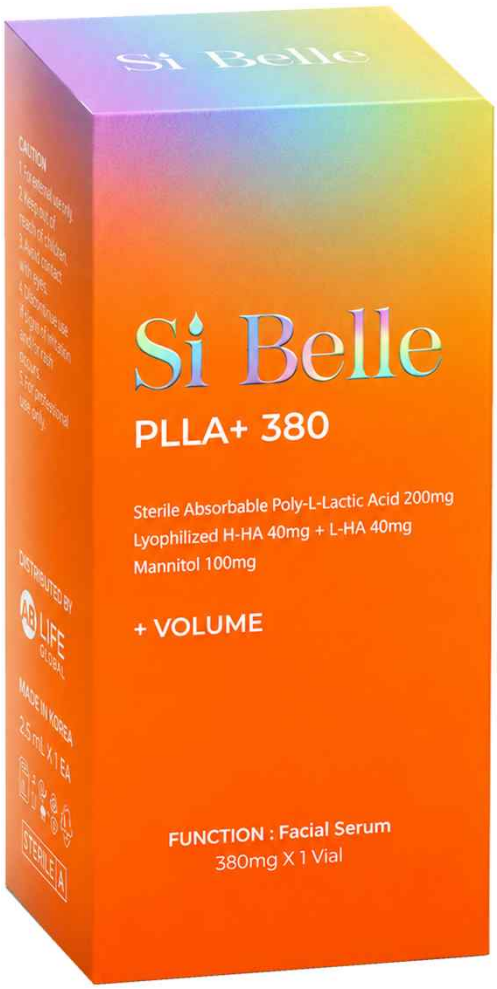
H-HA 40 mg + L-HA 40 mg

100 mg

Mannitol

380 mg / vial

www.ablife-global.com



PLLA 200 mg + HA 80 mg + mannitol 100 mg

Composition & scientific context

A four-ingredient formulation

Each vial contains 200 mg PLLA, 40 mg H-HA, 40 mg L-HA and 100 mg mannitol, for a total content of 380 mg.



52.6% PLLA **21.1% HA** **26.3% mannitol**

What PLLA research can explain

Material background

PLLA is poly-L-lactic acid, a polymer formed from L-lactic acid units. The supplied source discusses its biodegradation and the biological response around PLLA particles.

Collagen-related pathways

Cultured fibroblast studies report increased collagen expression with PLLA exposure and investigate p38 MAPK and TGF-beta/Smad signalling. [1,2]

Evidence boundary

These findings provide a rationale for studying PLLA. They do not establish the clinical performance, duration, safety or authorised indications of Si Belle PLLA380+.

Product specifications

Si Belle PLLA380+

Parameter	380 mg presentation
Total content	**380 mg / vial**
PLLA	**200 mg**
High-molecular-weight HA	**40 mg**
Low-molecular-weight HA	**40 mg**
Mannitol	**100 mg**
Particle size	**10-60 µm**
Particle morphology	**Microspheres**

10-60 µm

PLLA microsphere particle range

Published PLLA research

Cell-based evidence for collagen-related pathways

01 p38 MAPK signalling

Kim SA et al. / Annals of Dermatology / 2019 [1]

Human dermal fibroblasts (Hs68) were exposed to a PLLA preparation in vitro. The study reported increased type I collagen gene expression and protein synthesis, and investigated p38, Akt and JNK signalling using pathway inhibitors.

02 TGF-beta/Smad signalling

Zhu W & Dong C / Journal of Cosmetic Dermatology / 2023 [2]

Cultured dermal fibroblast experiments reported increased procollagen production and collagen-related expression following PLLA exposure. Receptor-inhibition experiments supported the involvement of the TGF-beta/Smad pathway.

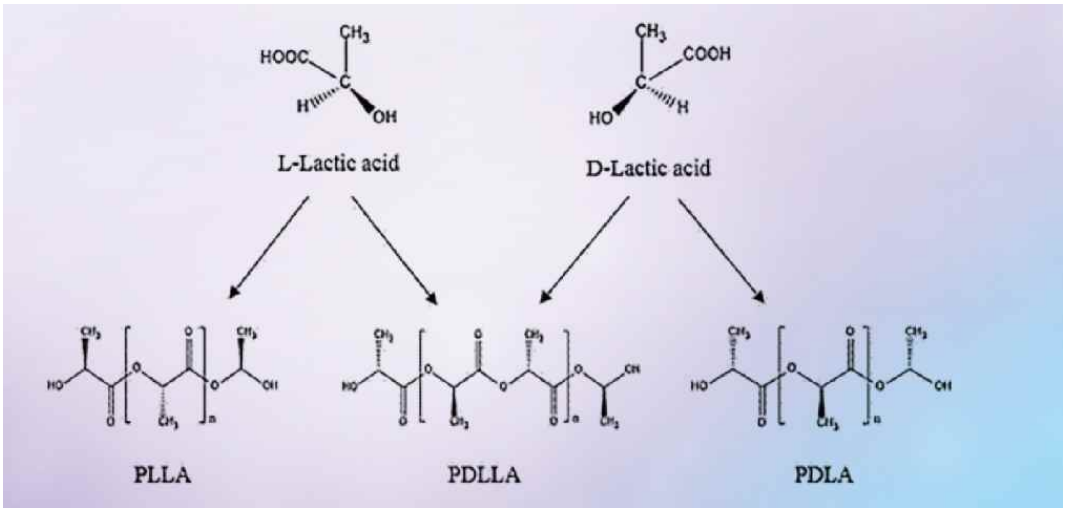
Research context

These are laboratory studies of PLLA-related biology, not clinical trials of Si Belle PLLA380+. They do not establish a treatment protocol, clinical effect size or duration for this finished product.

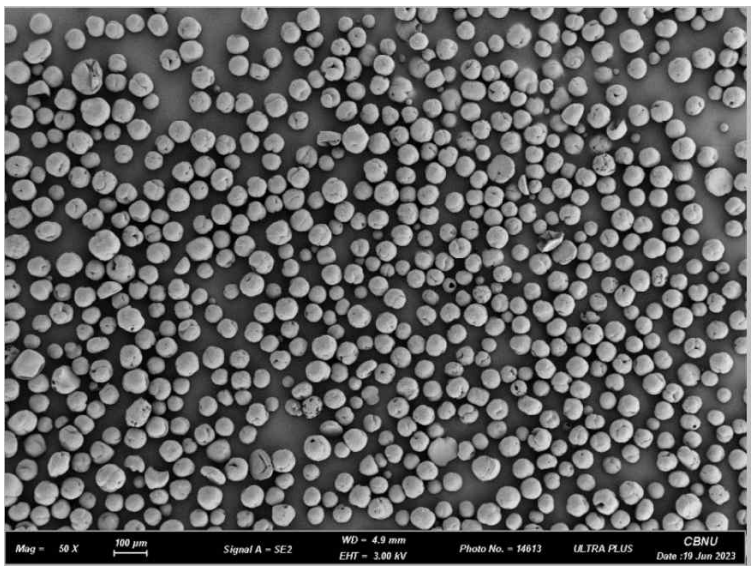
[1] doi:10.5021/ad.2019.31.1.97 / Kim SA et al., 2019
[2] doi:10.1111/jocd.15571 / Zhu W & Dong C, 2023

PLLA material & microspheres

PLLA chemistry



Microsphere morphology

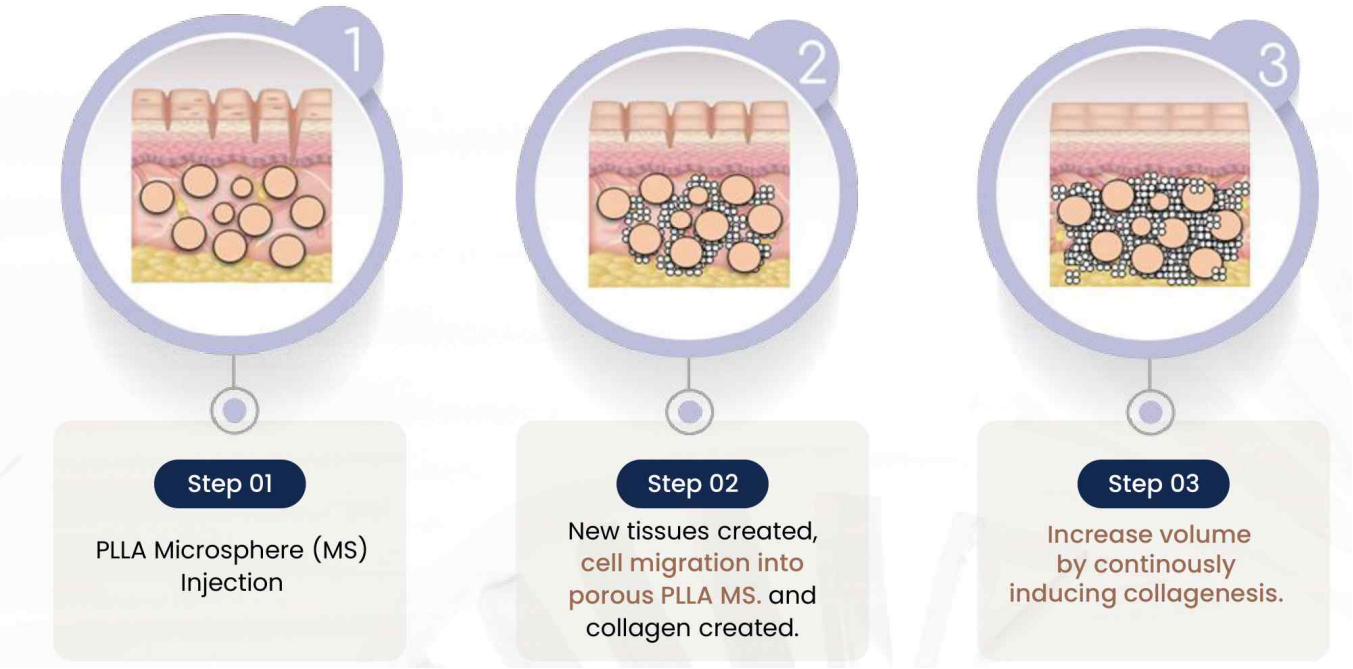


10-60 µm particle range

Role & principle

PLLA microspheres and tissue response

The manufacturer describes a progressive process involving PLLA microspheres, tissue response and collagen formation.



01 **PLLA microspheres**

Microspheres are introduced into the treatment area.

02 **Tissue response**

The proposed process involves cell migration around the particles.

03 **Collagen formation**

The manufacturer links this tissue response with collagen formation.

Recommended treatment areas

Facial areas



Forehead / Cheekbones / Cheeks

Nasolabial folds / Chin

Treatment planning is individual

Area selection and suitability are assessed by the treating clinician.

Preparation & professional review

380 mg model technical parameters

Parameter	Preparation details
Vial content	**380 mg**
Water for injection	**9.5 mL**
Lidocaine 2%	**2.5 mL**
Hydration time	**3 hours**
Vortex mixing	**1-2 min at beginning and end**

Professional assessment

Preparation, treatment and follow-up are planned by the treating clinician for the individual patient.

Technical data for professional evaluation

Aftercare & follow-up

An individual care plan

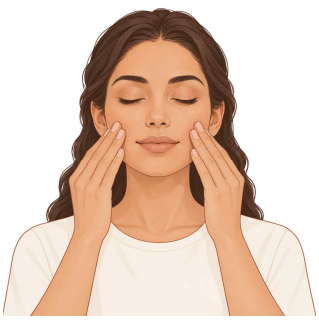
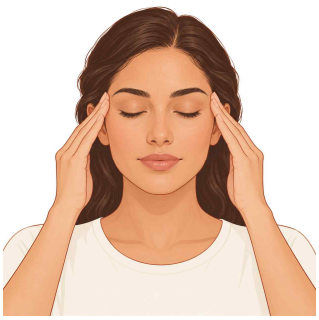
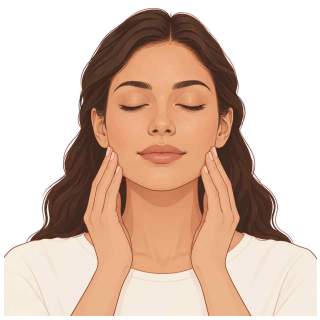


Post-treatment check-in

Discuss swelling, skin changes and follow-up timing with your treating clinician.

Personalised home care

Massage, cooling and other home-care measures should follow the treating clinician's individual instructions.


Questions & answers

Product and treatment planning

01 Who is the facial treatment intended for?

The product information describes facial volume loss, wrinkles and contour concerns. Suitability is assessed for each patient.

02 What is in each vial?

PLLA 200 mg, H-HA 40 mg, L-HA 40 mg and mannitol 100 mg, for a total content of 380 mg.

03 How does it differ from an HA-only filler?

The formulation combines PLLA microspheres with hyaluronic acid. PLLA-related tissue response is part of the manufacturer's rationale.

04 Are the polymer materials biodegradable?

PLLA and HA are biodegradable materials. Material characteristics do not replace an assessment of the finished product and patient.

05 What is the recommended treatment schedule?

The manufacturer describes 2-3 sessions, approximately 4 weeks apart. The treating clinician determines the individual treatment plan.

Questions & answers

Results, recovery and clinical considerations

06 How long does the manufacturer report an effect?

The manufacturer cites approximately 18-24 months after an initial 2-3 sessions. This is a reported estimate; individual durability varies.

07 What about recovery and daily activities?

Pain, bruising, injection marks and swelling may occur. Recovery and return to activities depend on the individual clinical response.

08 Can nodules occur?

Nodules can occur and may require further treatment.
The treating clinician assesses and manages individual concerns.

09 Why can early appearance change after treatment?

The manufacturer attributes some early volume to the preparation fluid. Swelling and appearance can change as that fluid is absorbed.

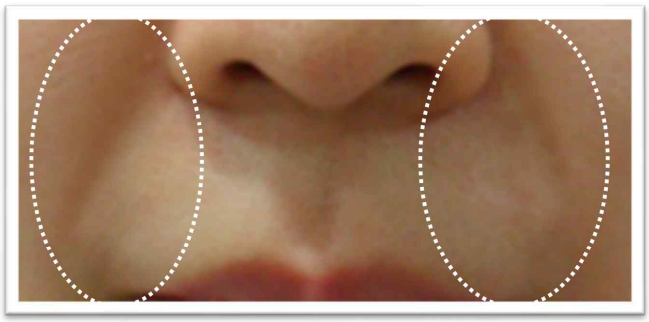
10 How are bleeding or bruising addressed?

Bleeding and bruising are discussed in the product information.
The treating clinician assesses and manages these concerns.

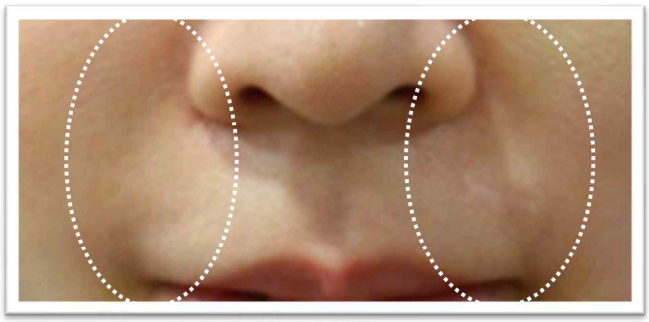
Applications

Manufacturer facial treatment examples

01 Nasolabial region



Before

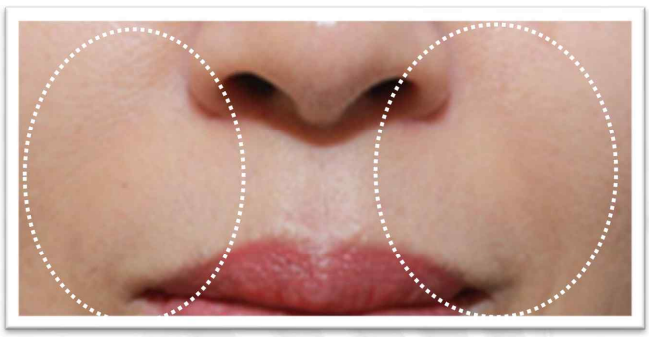


After 2 months

02 Nasolabial region



Before



After 3 months