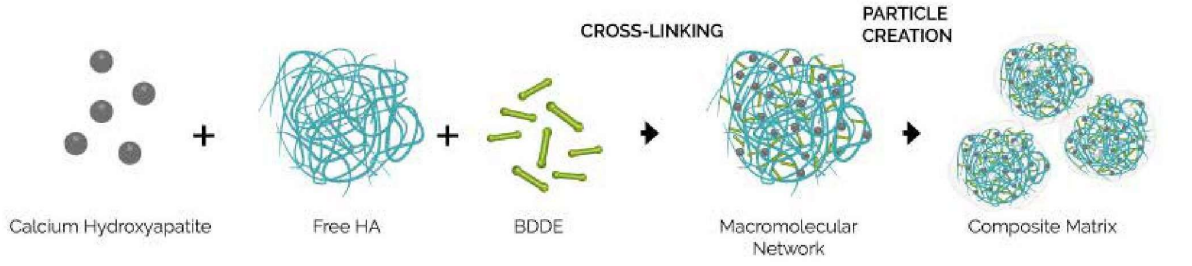
HArmonyCa

OUR COMPOSITE MATRIX FILLER

HArmonyCa dermal filler is designed to restore facial volume and correct deficiencies by promoting the generation of natural endogenous collagen. HArmonyCa is based on a composite matrix of cross-linked Hyaluronic Acid embedding Calcium Hydroxyapatite microspheres.

Composition

- Calcium Hydroxyapatite (55.7%)
- Sodium Hyaluronate gel (20 mg/ml), cross-linked (BDDE <2 ppm)
- Phosphate buffer
- 0.3% lidocaine



ADVANTAGES

WHY HArmonyCa?

- Provides a strong volumising, lifting effect
- Susceptible to Hyaluronidase
- Reduced side effects, such as burning sensation, edema and pain
- Promotes generation of natural collagen
- Non-animal origin Hyaluronic Acid
- Biocompatible and biodegradable

OUR TECHNOLOGY

THE SYNERGY OF TWO IN ONE

HArmonyCa contains both Calcium Hydroxyapatite & Hyaluronic Acid

ONE SYRINGE

The concentration of each active ingredient is similar to that of Calcium Hydroxyapatite and Hyaluronic Acid dermal fillers combined in one syringe.

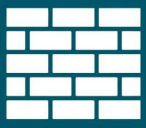
COLLAGEN

Collagen stimulation increases due to the combination of both active ingredients, providing a long lasting effect.

HYDRATION

The presence of Hyaluronic Acid elevates skin hydration and moisture.

STABLE



Calcium Hydroxyapatite is added during the cross-linking process, generating a stable, inseparable gel.

FIXATION

The Composite Matrix gel can prevent microspheres aggregation and dispersion, keeping the microspheres within their desired location.

MATRIX

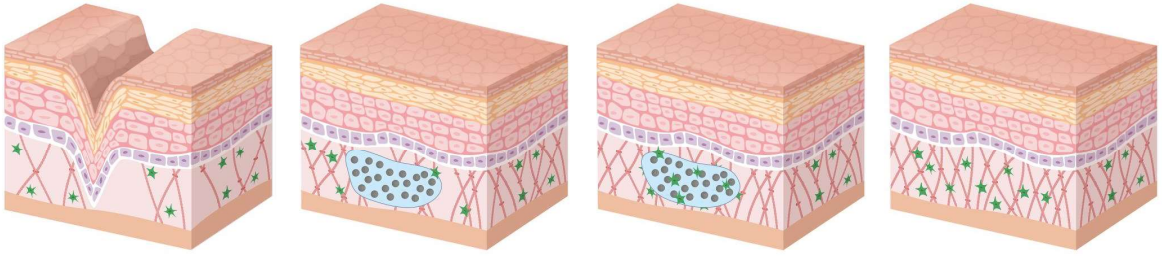
Calcium Hydroxyapatite stimulates collagen production, while Hyaluronic Acid forms a supporting extracellular matrix, which modulates fibroblasts proliferation.

HOW IT WORKS

MECHANISM OF ACTION

IMMEDIATE - A volumising effect and a full glowing look is immediately apparent due to the presence of Hyaluronic Acid.

LONG LASTING - The Calcium Hydroxyapatite microspheres form a scaffold supporting fibroblasts ingrowth. The Hyaluronic Acid binds to fibrin, which generates the supporting extracellular matrix. A "hyaline cartilage like" formation is generated by differentiating fibroblasts cells into chondroblasts, which deposit endogenous collagen- the natural lifting agent of the skin. Degradation of the gel is synchronous with neo-collagen production resulting in a natural, youthful, long-lasting appearance.



Facial lesion due to collagen and HA depletion

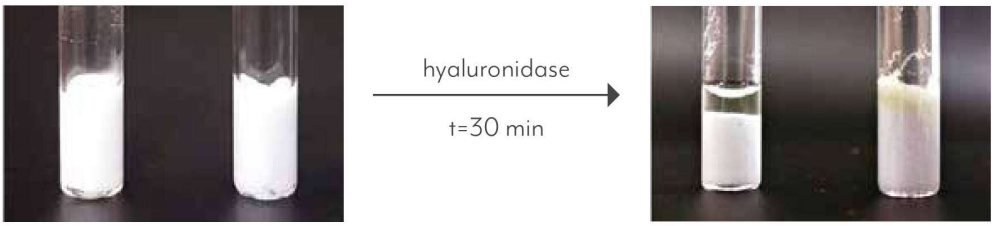
Immediate volumising effect created by the HA within the composite matrix

CaHA microspheres form a scaffold and stimulate fibroblast **production of new collagen**

Material degradation synchronous with neo-collagen deposition providing a **long lasting, natural, youthful look**

Collagen Fibroblasts HArmonyCa

HYALURONIDASE SUSCEPTIBILITY



HArmonyCa Calcium Hydroxyapatite

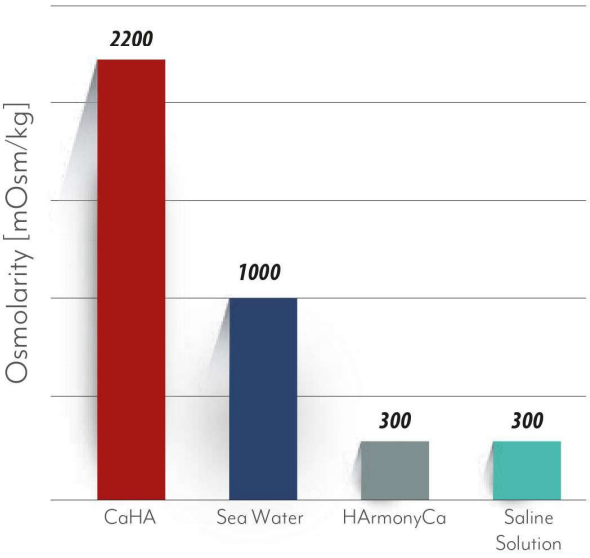
HArmonyCa Calcium Hydroxyapatite

The Hyaluronic Acid gel component is 70% of the syringe volume and can be completely dissolved thus breaking the composite matrix infrastructure.

HOW IT WORKS

PHYSIOLOGICAL LEVEL COMPARISON

The osmolarity of CaHA dermal fillers reaches ~ 2200 mOsm/kg, more than double the amount in sea water. This generates a strong burning sensation, as well as edema, pain and swelling.
In comparison, HArmonyCa's osmolarity is ~ 300 mOsm/kg, similar to that of saline, allowing a comfortable treatment and substantially less side effects.



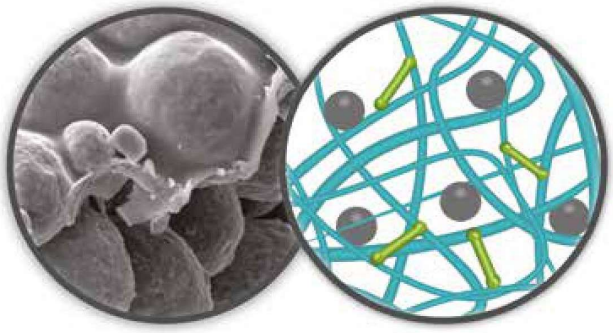
MICROSPHERE MORPHOLOGY

HArmonyCa composite matrix is comprised of Calcium Hydroxyapatite microspheres that are strongly embedded within high quality cross linked Hyaluronic Acid.

• The Calcium Hydroxyapatite microspheres are round, non-porous and smooth, enabling easy extrusion.

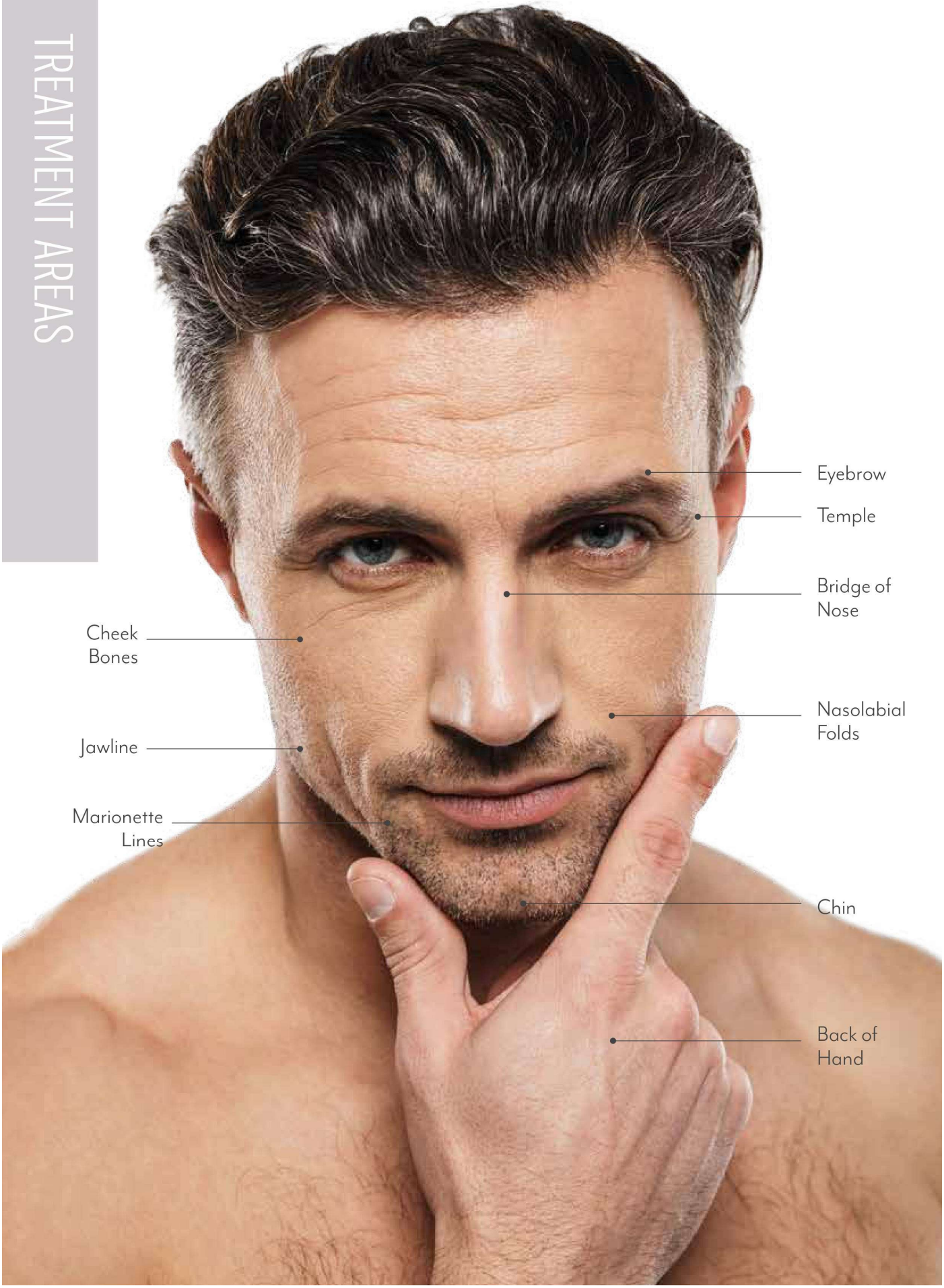
• The microsphere diameter (25-45 microns) minimizes risk of particle migration and phagocytosis which, in addition to the microspheres' integration within a net of cross-linked Hyaluronic Acid, ensures a smooth appearance.

• Microspheres embedded within cross-linked Hyaluronic Acid helps preserve the balance between microsphere consolidation and dissemination.



Scanning Electron Micrographs x600

TREATMENT AREAS



BEFORE & AFTER

BEFORE

AFTER