

medicube⁺

AGE-R PLUS G Solution with PN

A Premium PN Skin Booster

Refined through Precise Molecular Weight Engineering



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Refined through Precise Molecular Weight Engineering



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Product Name	Medicube AGE-R PLUS G
Intended Use	Used to temporarily improve mild to moderate crow's-feet wrinkles in adults through physical restoration following subcutaneous injection of sodium hyaluronate and sodium polynucleotide.
Ingredients	PN 1%, HA 1% with lidocaine
Packaging	1ml × 1 Syringe / box
Storage	Store at room temperature (1-30°C)

References

¹Lee KWM, Chan KNL, Lee A, et al. Polynucleotides in Aesthetic Medicine: A Review of Current Practices and Perceived Effectiveness.

International Journal of Molecular Sciences. 2024;25(16):8224.

²Guzzardi S, Belotti S, et al. The role of polynucleotides in regenerative medicine and aesthetic applications. Journal of Cosmetic Dermatology Science and Applications. 2013.



Medicube AGE-R PLUS G

KGMP Medical Device

PN 1%, HA 1% With Lidocaine

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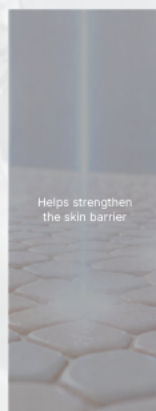
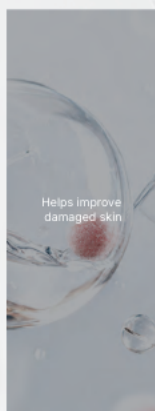
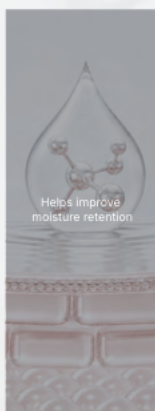
AGE-R PLUS G Solution with PN

PN (Polynucleotide)

Polynucleotide (PN) is a high-molecular-weight nucleic acid derived from purified salmon DNA. Owing to its **high biocompatibility**, it is widely used to support skin and tissue regeneration.¹

In medical aesthetics, PN is used to help maintain a healthy skin environment and support tissue recovery. It is incorporated into various procedures intended to **improve skin condition**.²

Medicube AGE-R PLUS was developed based on the intrinsic properties of PN for use by medical professionals in a range of clinical settings.





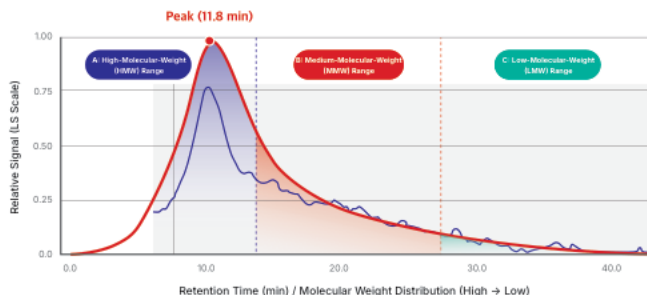
Why AGE-R PLUS?

1. Optimal PN Molecular-Weight Composition

We designed an optimal PN molecular-weight distribution to achieve both **rapid initial effects** and **sustained improvements in skin condition**.

► Smoothed LS Molecular Weight Distribution

• GPC Measurement Results for APR PN Raw Material



Source: GPC-MALS Analysis Results (APR PN - 25PN002),
ASTRA 6 Report 25 PN 002 [Sequence 2]

SECTION A

HMW Range

Helps support the skin and maintain elasticity

Approx. **42.5%**

SECTION B

MMW Range

Helps improve skin condition and provide balanced effects

Approx. **45.0%**

SECTION C

LMW Range

Supports rapid diffusion within the skin and an early initial effect

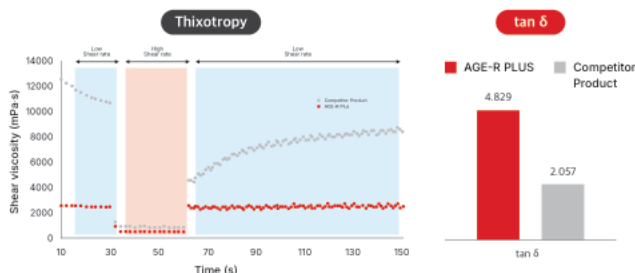
Approx. **12.5%**

2. Formulation Designed to Minimize Downtime

Its stable viscoelastic properties and rapid structural recovery help reduce raised injection-site bumps ("embossing") after procedures and minimize downtime.

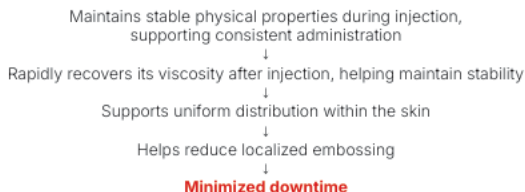
► Thixotropy / $\tan \delta$

- 3-Step Measurement: Low Shear → High Shear → Low Shear



Source: DQP-702F08-AGE-R Plus Characteristic Analysis Report – Internal Research Data

- Flat thixotropy curve** → Minimal viscosity change in response to shear, supporting consistent and predictable administration
- High $\tan \delta$** → Good fluidity, facilitating distribution within the tissue



3. Carefully Selected Premium Ingredients

Because this product is injected directly into the skin, it is made using carefully selected ingredients.

PN Derived from Alaskan Salmon

Injectable-Grade HA from HTL



PN Derived from Alaskan Salmon

Polynucleotide(PN)

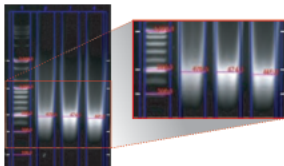
HA from HTL

- Raw material covered by a U.S. NOAA/NMFS export health certificate
- Derived from wild Alaskan salmon milt
- Manufacturing Process: Compliant with ISO 13485 and KGMP requirements

4. Consistent Quality

We manage every stage—from raw-material sourcing through manufacturing and quality control—under strict standards to minimize batch-to-batch variation and ensure consistent product quality.

- | | | | | |
|--|---|--|---|---|
| 01 RAW MATERIAL
Rigorous manufacturing process comprising 11 proprietary PN extraction steps | 02 FILLING
Preparation of the product solution and automated syringe filling
Use of automated equipment to minimize foreign matter | 03 STERILIZATION
Moist heat sterilization in accordance with ISO 17665 | 04 QUALITY CONTROL
Rigorous quality testing covering 18 physicochemical and microbiological tests | 05 EXPORT
Global distribution hub |
|--|---|--|---|---|

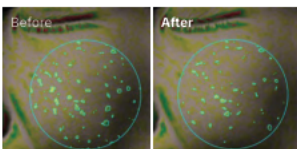


Electrophoresis Data
- Comparison Across In-House Lots

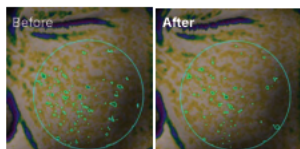
- Bands are located within the defined range
 - Minimal batch-to-batch variation
- **Enable predictable treatment outcomes**

► Skin Changes Observed After a Single Treatment

- Skin Assessment
(before treatment and 30 days after a single treatment; F (40s) [top], M (40s) [bottom])



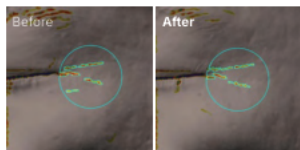
* Standard Light: Improvements observed in wrinkles, pores, and skin tone



* Polarized Light: Improvements observed in erythema and skin tone



* Normal Light: Improvements observed in skin redness, pores, and skin tone



* Standard Light: Improvements observed in skin radiance, pores, and texture

Evaluation Criteria	Skin Surface Hydration	Maximum Depth of Crow's-Foot Wrinkles	Maximum Depth of Forehead Wrinkles	Cheek skin protrusion (unevenness)	Cheek Skin Depression
Changes from baseline to 30 days after a single treatment	+40.2%	-16.1%	-15.2%	-42.6%	-36.8%

AGE-R Plus Human Application Test (Investigator-Initiated Clinical Study),
Global Institute of Dermatological Sciences (n=2; mean values)



Improvements in skin condition were observed after a single treatment with AGE-R Plus.

Positive changes were observed in key skin parameters, including a 40.2% increase in skin surface hydration, a 16.1% decrease in the maximum depth of crow's-foot wrinkles, and a 15.2% decrease in the maximum depth of forehead wrinkles.

Improvements were observed after a single treatment. More pronounced results are expected after a series of 3 to 4 treatments.