

# Elravie® Premier

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High Purity HA Dermal Filler

# Elravie® Premier

Elravie is a combination of 'Ela' from elasticity and 'Vie' from life in French. Rejuvenate your skin vitality and elasticity via Elravie.

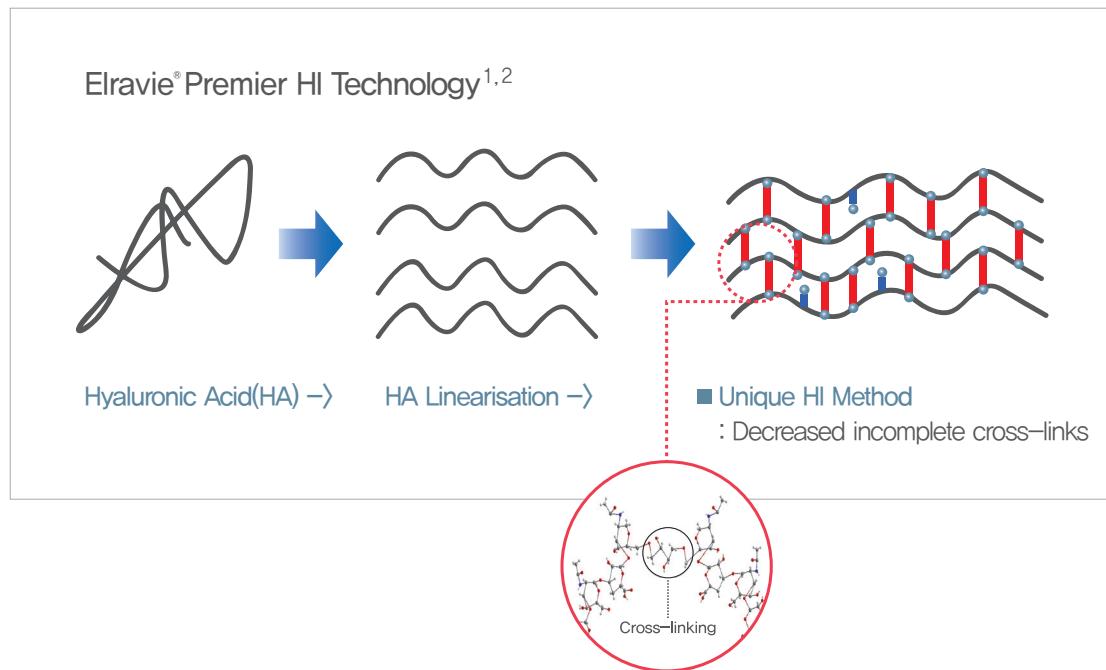


‘ela’sicity + ‘vie’(life)

# HI (High molecular Ideal Reticulated Matrix)<sup>1</sup>

## HI Technology

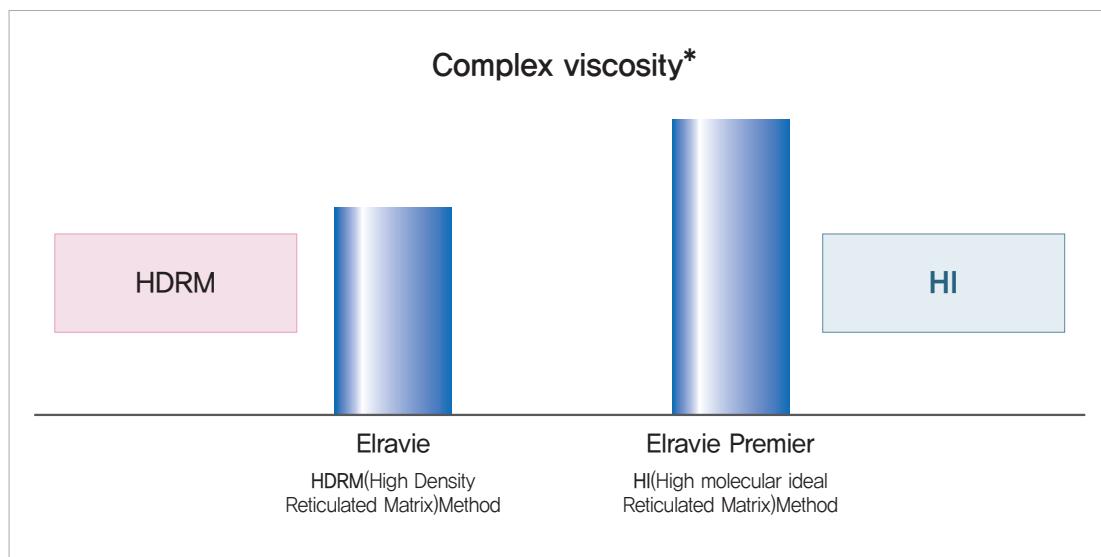
- A manufacturing method of cross-linking hyaluronic acid of a polymer which makes it into an ideal reticulated matrix.
- Reduces incomplete cross-links with low-temperature & long-time cross-linking ► Increased efficiency of cross-linking.



## Elravie® VS Elravie® Premier

### Humedix' innovative HI Method

- Compared to Elravie, Elravie Premier indicates a higher degree of complex viscosity while having similar physical property.
- Elravie has higher resistance against external force and shows stability due to high complex viscosity

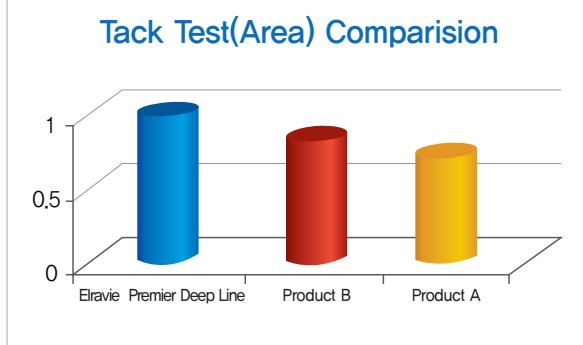
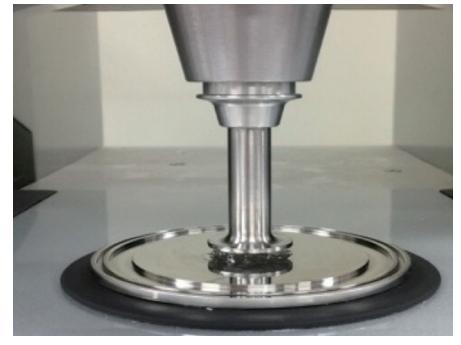


\*Complex Viscosity: A unit that measures the degree of total deformation against an external force

# Elravie® Premier's Cohesiveness

## Comparison of results from Tack Test\*

- Elravie Premier shows superior cohesiveness.



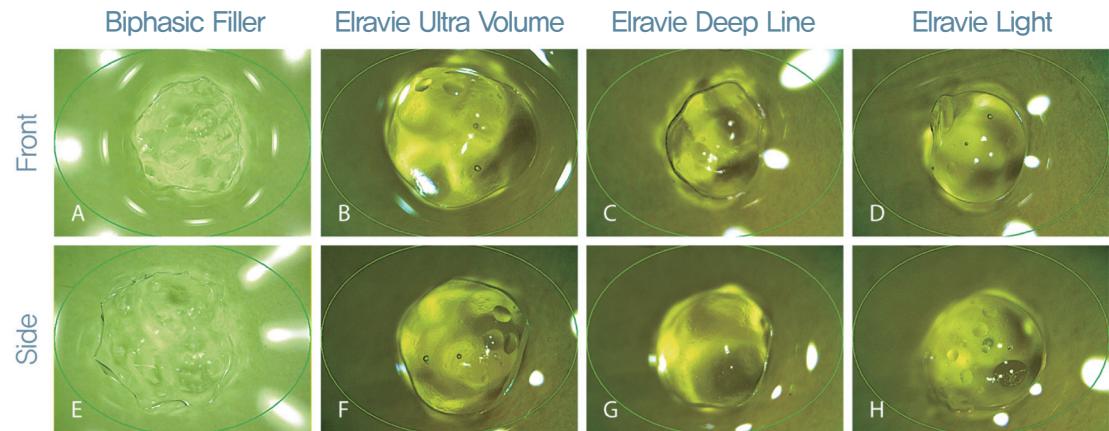
\* Tack test :

Cohesiveness Force Measurement Test. It measures the maximum force of adherence to Rheometer spindle of the sample after it's pushed by the spindle. Higher value means higher cohesiveness.

## Cohesiveness of Elravie® Premier

Elravie Premier applies to a various type of purpose in need of the smooth and forceful procedure.

### The shape of Elravie Premier



# Comparison of Shear Viscosity & Yield Stress

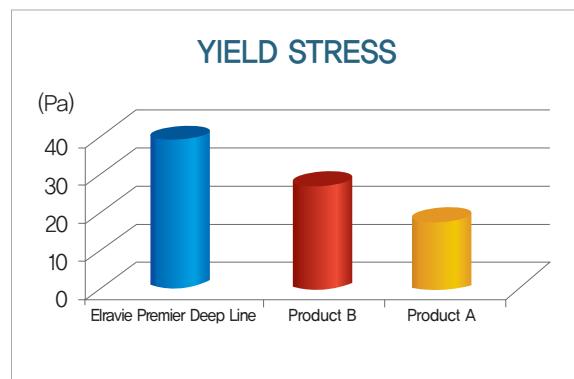
## Elravie Premier shows

- Higher shear viscosity presenting stronger resistance against external force.
- Greater yield stress.



\*Shear viscosity :

A degree of resistance to flow. It refers to the force that resists external force (shear force).



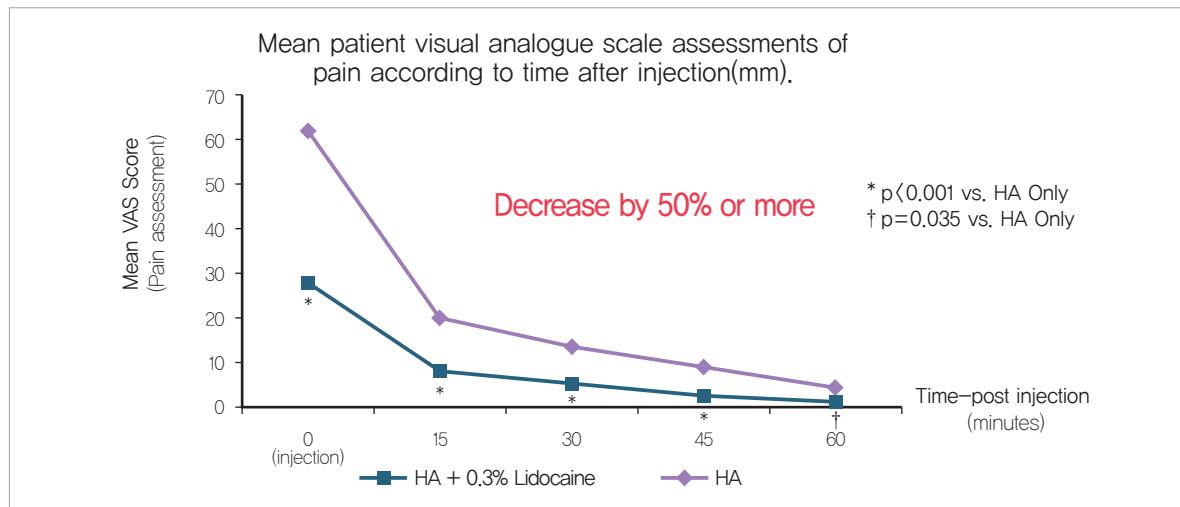
†Yield Stress :

The stress level at which a material ceases to behave elastically. It is a measure of the strength of the material structure.

When an object receives a load from the outside, it is returned to its original status before deformation until some point. However, if the load exceeds a certain value, the object cannot be restored to the initial status even if the load is removed, and the permanent deformation of a certain size is maintained.

## Pain Relief Effect

HA fillers containing 0.3% lidocaine alleviates pain during/after the injection.<sup>1</sup>



① Study design : Single-blind, Random allocation, Single-center, Split-face design

② Patients : 45 Adults who received similar wrinkle scores on both sides of the face (All Fitzpatrick skin type)

③ Treatment : Measures pain during/after the procedure utilizing VAS after the treatment on nasolabial folds; injection of HA with lidocaine on one side and injection of HA only without lidocaine on the other side.

HA has a relatively lower side effect profile since it is without species or chemical specificity. Treatments with adjunct lidocaine do not appear to significantly change this profile. **Several studies suggest adjunct Lidocaine decreases swelling, erythema, and even bruising.** The use of lidocaine with epinephrine in one study could affect the interpretation of these observations.

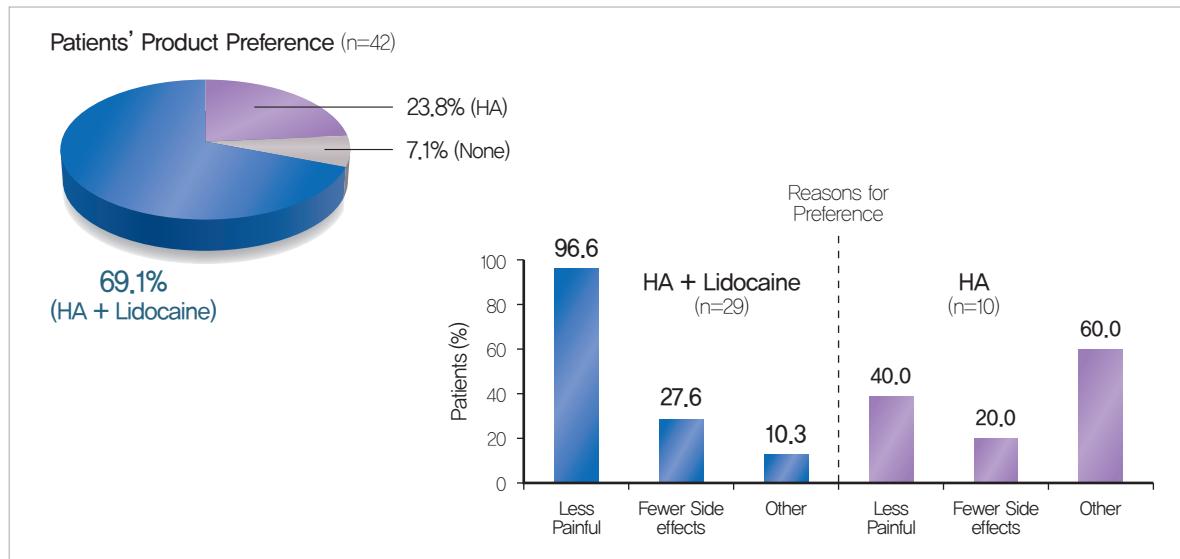
→ Through many studies, HA fillers containing lidocaine shows reduced side effects such as swelling, red spots, and bruise.<sup>2</sup>

Ref 1. Monheit GD, et al, *Dermatol Surg*. 2010;36(1):94-101.

2. Smith L, et al, *Patient Prefer Adherence*. 2011;5:133-139.

# Patients' Preference

HA fillers containing 0.3% lidocaine shows higher preference of patients after the injection.



① Study design : Single-blind, Random allocation, Single center, Split-face design

② Patients : 45 Adults who received similar wrinkle scores on both sides of the face (All Fitzpatrick skin type)

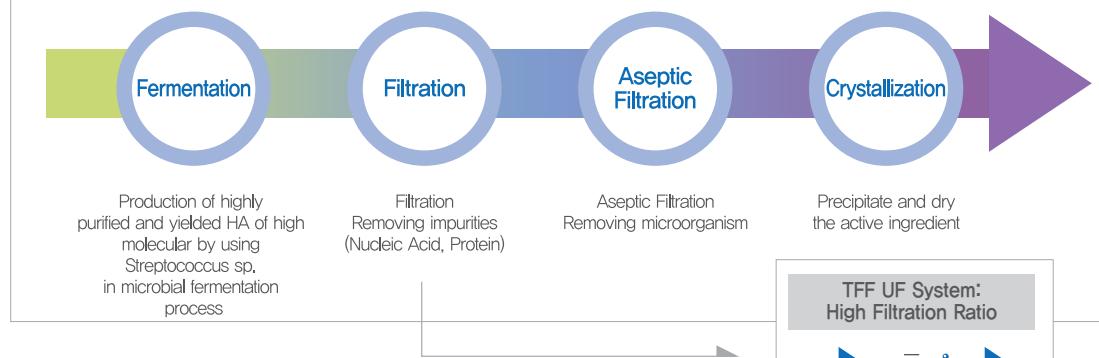
③ Treatment : Measures pain during/after the procedure utilizing VAS after the treatment on nasolabial folds; injection of HA with lidocaine on one side and injection of HA without lidocaine on the other side

# High Purity HA Filler - Elravie® Premier

## Immune-inducing material reduction

- Polymeric material from microbial fermentation
- Introduction of TFF UF (Ultra Filtration) System\* in purification
- Aseptic high-purity HA of which the level of endotoxin and protein level is reduced by NIA<sup>†</sup>, the unique manufacturing method

## Process

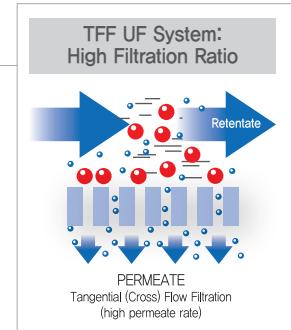


\*TFF UF (Tangential Flow Filtration Ultra Filtration) System

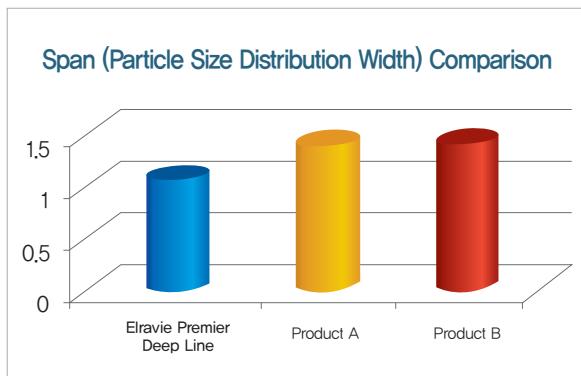
: Ultra Filtration system that concentrates polymer and filters out impurities that are small in molecular weight.

<sup>†</sup>NIA Method [Non Inflammation Asepsis]

: Technology to remove protein, hexane, endotoxin, and other inflammatory and exothermic substances by a membrane separation process



# Uniform and Small Particle

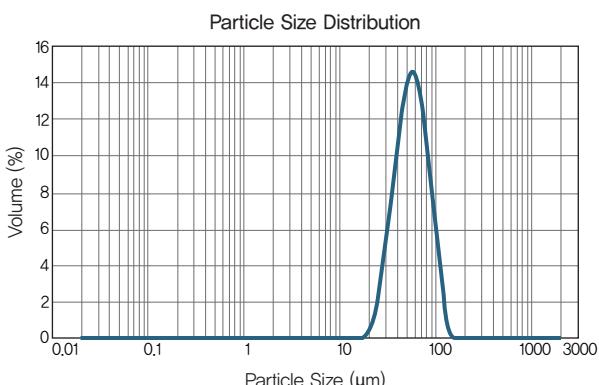


## Uniform Particle

- The Span<sup>§</sup> value is close to 1.0 and particles are uniform with low value of Uniformity.<sup>¶</sup>

<sup>§</sup> Span: Left/Right Symmetry plot of the evaluation graph  
(Perfect symmetry with a span value of 1)

<sup>¶</sup> Uniformity: The distribution of particles  
(The lower the value, the closer and evener the distribution)  
(The lower the value, the sharper the graph)



## Small Particle

- When measured with particle size analyzer, Elravie Premier indicated a low figure.

Categorize	Product Name	Elravie Premier Deep Line	Product A	Product B
Particle Size Analysis Result	D (0.1)*	35.218	116.249	80.793
	D (0.5)†	59.885	238.911	156.738
	D (0.9)‡	99.536	453.917	304.559

\* D(0.1): The particle size at 10% of the total distribution of matter.

† D(0.5): The particle size at 50% of the total distribution of matter.

‡ D(0.9): The particle size at 90% of the total distribution of matter.

## Proven long-term persistence (18 Months)

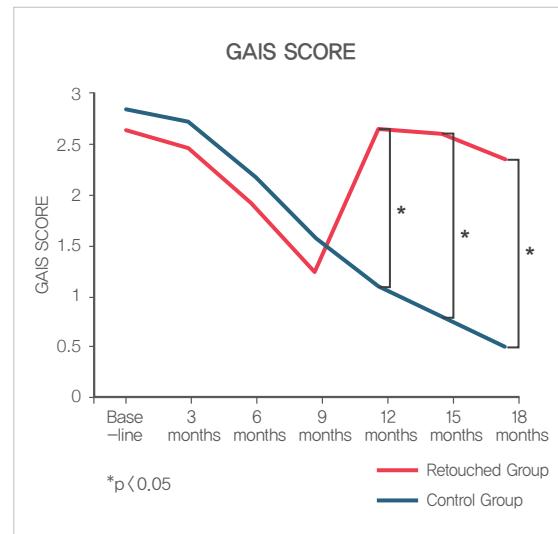
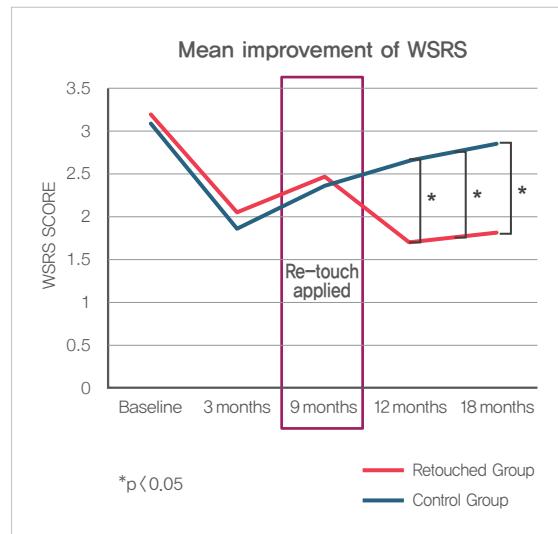
18 months lasted the effect of Elavie (HA-only product) with a single time re-touch

- **WSRS**  
(Wrinkle Severity Rating Scale)

Degree	1	2	3	4	5
Description	absent	mild	moderate	severe	Extreme

- **GAIS**  
(Global aesthetic improvement scale)

Degree	-1	0	1	2	3
Description	Worse	No change	Improved	Much improved	Very much improved



① Study design: Random allocation, Control Test

② Patients: 50 people with visible, moderate to severe nasolabial wrinkles

③ Treatment: After the same amount of HA in both nasolabial wrinkles, only the test group received re-touch 9 months after the first treatment; Evaluation of WSRS and GAIS.

# Monophasic Volumizing Filler – Elravie® Premier

## • Excellent Quality & Safety<sup>1</sup>

- High purity HA made with TFF UF System and NIA method(Non-Inflammation Asepsis),  
its level of protein and endotoxin is significantly lowered.<sup>2,3,4</sup>
- HI Method(High molecular Ideal Reticulated Matrix) significantly reduces none cross-linking rate.<sup>1</sup>
- The raw material of HA is pharmaceutical grade and the raw material of 'HA for arthritis' and has excellent biocompatibility.

## • Superb Effect & Duration<sup>5</sup>

- Natural looking by smooth and strong HA gel; keeps volumizing by high cohesiveness and do not easily spread to other areas
- 18 months did the effect of Elravie (HA-only product only) last with one-time re-touch.

## • Convenient Procedures

- User-friendly finger grip assures delicate procedure.
- TW (Thin Wall) needle and cannula are included to provide the convenience of a procedure

## • Famous Reputation

- As a second brand to be launched in Korea, its quality and reputation are assured throughout long-term clinical usage within doctors/patients.
- Elravie received the Jang Young-Sil(Famous inventor in Korea) Award in 2014 and the Consumer's Choice Filler Award in 2016.
- Elravie is officially registered in Europe(CE), China(CFDA), Indonesia, Iraq, Iran, Vietnam, Republic of Dominica and is under registration worldwide.

## With Lidocaine



### Elravie Light-LC 1mL

HA concentration ..  
23mg/mL, 0.3% Lidocaine  
Volume ..  
1,0mL  
Needle ..  
30G Thin Wall needle



### Elravie Deep Line-LC 1mL

HA concentration ..  
23mg/mL, 0.3% Lidocaine  
Volume ..  
1,0mL  
Needle ..  
27G Thin Wall needle  
23G 50mm TW Cannula



### Elravie Ultra Volume-LC 1mL

HA concentration ..  
23mg/mL, 0.3% Lidocaine  
Volume ..  
1,0mL  
Needle ..  
23G Thin Wall needle  
22G 50mm TW Cannula



### Elravie Ultra Volume-LC 2mL

HA concentration ..  
23mg/mL, 0.3% Lidocaine  
Volume ..  
2,0mL  
Needle ..  
21G Thin Wall needle  
22G 50mm TW Cannula

## Without Lidocaine(CE)



### Elravie Light Plus 1mL

HA concentration ..  
20mg/mL  
Volume ..  
1,0mL  
Needle ..  
30G Thin Wall needle



### Elravie Deep Line Plus 1mL

HA concentration ..  
23mg/mL  
Volume ..  
1,0mL  
Needle ..  
27G Thin Wall needle



### Elravie Ultra Volume Plus 1mL/2mL

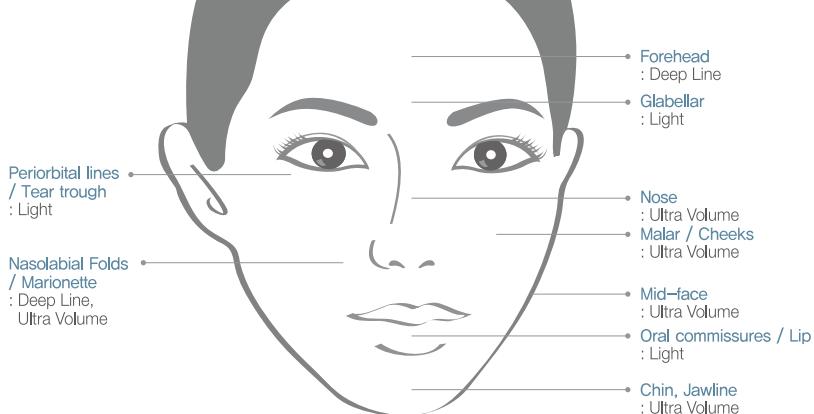
HA concentration ..  
23mg/mL  
Volume ..  
1mL/2mL  
Needle ..  
1mL : 23G Thin Wall needle  
2mL : 21G Thin Wall needle



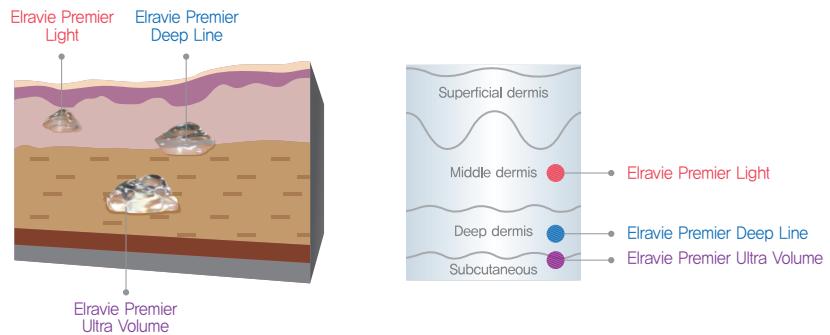
### Elravie Balance 1.5mL

HA concentration ..  
20mg/mL, 0.3% Lidocaine  
Volume ..  
1,5mL  
Package ..  
1.5mL X 2syr.

## Procedure part of product line“ Elravie Premier ”



## Injection point of product line “ Elravie Premier ”



# Elravie® Premier

High Purity HA Dermal Filler

Manufactured By



17, Bio Valley 2-ro, Jecheon-si, Chungcheongbuk-do, Korea

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Humedix is a family company of Huons and is a bio company that manufactures and researches HA raw material production and HA related joint injections, ophthalmic eye drops, ophthalmic viscoelastics, anti-adhesion agents and functional cosmetics.