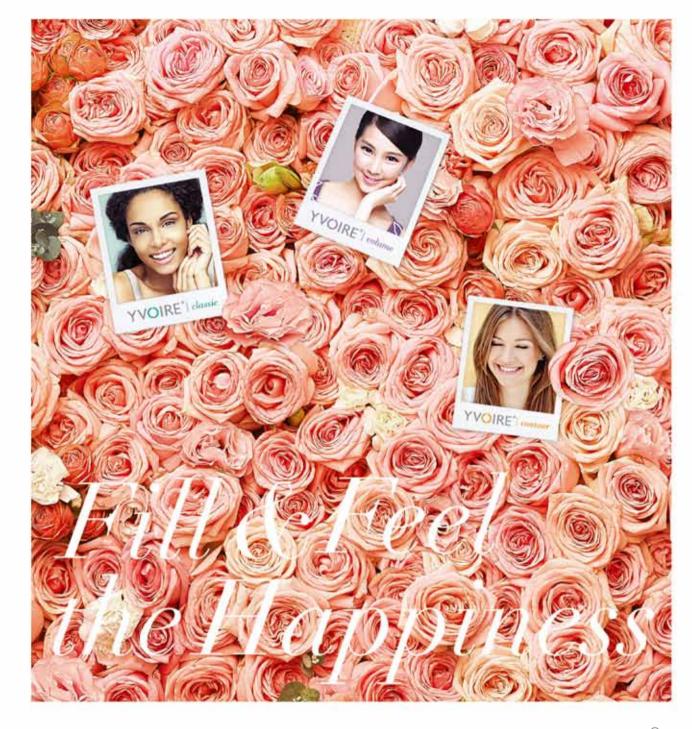
Fill & Feel the Happiness, YVOIRE®



Fill & Feel the Happiness, YVOIRE®







## Distinguished HA raw materials







LG Life Sciences has developed and manufactured HA products over 20 years.

1990

- HA R&D started with Producer Strain Development

1995

- Korea's 1st HA Ophthalmic Viscoelastics, Hyal

2005

- Korea's 1st 3-Injection HA OA Viscosupplement, Hyruan Plus

2010

- Korea's 1st HA Filler, YVOIRE

2013

- Korea's 1st Lidocaine HA Filler, YVOIRE plus



#### Reliable HA material submitted to US FDA and approved by EDQM

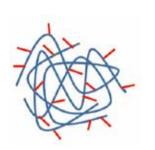
LG Life Sciences' non-animal origin HA has been marketed in various medical fields since 1998 with proven safety and efficacy. Its high molecular weight HA has been approved by the European Directorate for the Quality of Medicines and its drug master file has been filed to the US FDA.



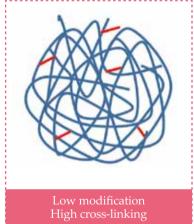
## **HICE** technology

#### To improve the cross-linking efficiency of YVOIRE, HICE<sup>1)</sup> technology is applied.

HICE technology, which enables to reach the maximum cross-linking ratio despite of "minimal use of cross-linkers" by dispersing the cross-linkers into highly concentrated HA during cross-linking reaction.







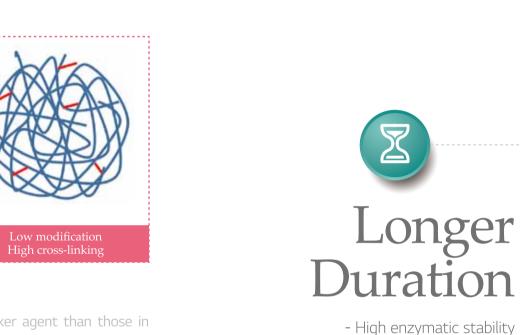
High modification Low cross-linking

Moderate modification Moderate cross-linking

High elasticity is shown with a lower amount of cross-linker agent than those in other equivalent competing products.

Product	MoD(%) <sup>2)</sup>	Elasticity <sup>3)</sup> (G',Pa)
A product	9	227
B product	3	270
C product	10	144
YVOIRE*4)	2	500

- 1) HICE technology stems from the creative technology of YVOIRE. HIgh Concentration Equalized cross-linking technology.
- 2) Degree of modification of HA
- 3) Value measured at 0.02 Hz
- 4) YVOIRE contour





- High molecular weight HA
- Maximum cross-linking ratio with minimum modification



(BDDE) content

Advantages of **HICE Cross-linking Technology** 

- High biocompatibility

- Lower cross-linker



### Clinical Trials

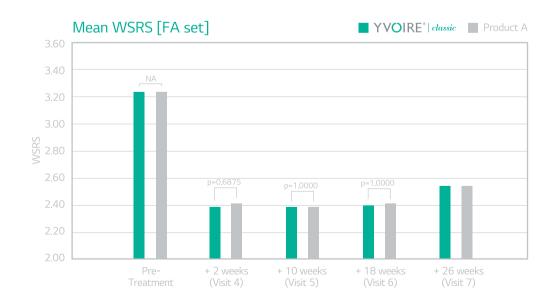
YVOIRE proved its efficacy and safety profiles through its clinical trials.





#### [ Clinical Trial ]

By measuring the mean WSRS of both groups at +26 weeks (visit 7) after the injection of nasolabial folds, it was demonstrated that the clinical efficacy of YVOIRE classic s was equivalent to that of Product A.







#### [ Clinical Trial ]

By measuring the mean WSRS of both groups at +26 weeks (visit 7) after the injection of nasolabial folds, it was demonstrated that the clinical efficacy of YVOIRE volume s was equivalent to that of Product B.

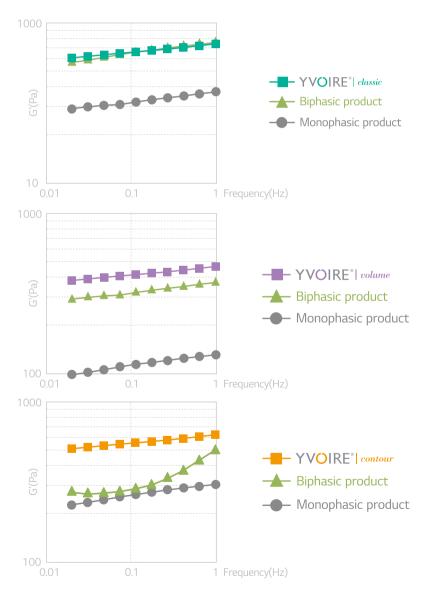




## Ideal Rheological Properties

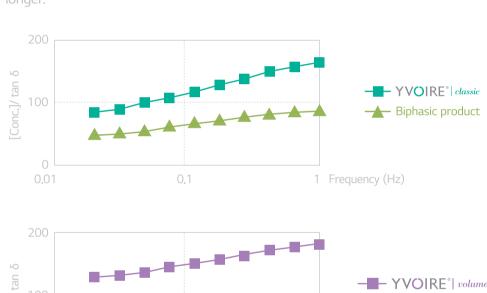
As YVOIRE shows high G' value, excellent supporting capacity is expected.

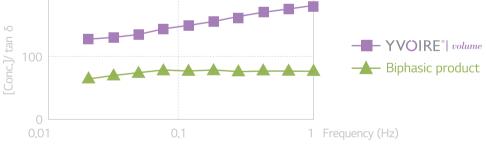
[Storage Modulus (G')] YVOIRE shows higher G' value than other competitors. As it has higher resistance to deformation, YVOIRE can exhibit better tissue augmentation effects.

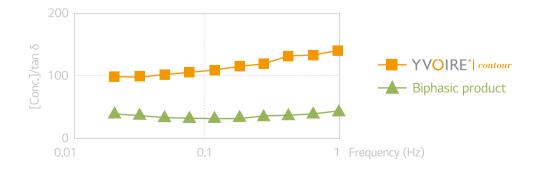


### As YVOIRE shows high [Conc.]/tan $\delta$ value, much longer persistence is expected.

[ [Conc.]/tan  $\delta$  ] HA fillers with higher concentration and higher elasticity (lower tan  $\delta$  ) are predicted to be more persistent. As YVOIRE has higher [Conc.]/tan  $\delta$  value than the other competitors, its duration of filler effectiveness is expected to be longer.







## Distinguished Product Line

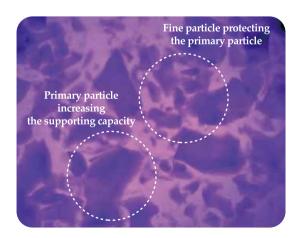
When injected, YVOIRE contour shows the smooth surface outlines and excellent supporting capacity owing to its ideal multi-particle size composition.

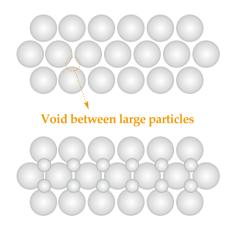




#### [ Microscopic view of YVOIRE contour ]

In YVOIRE contour, fine particles of cross-linked HA fills the void between around the large main particles, resulting in smoother surface on the correction areas as well as continuous, uniform and flowing injection sensation regardless of its larger average particle size.





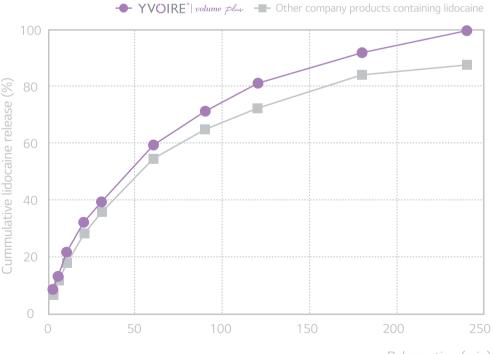
<sup>\*</sup> Microscopic view of YVOIRE contour dispersed in saline and toluidine blue.

YVOIRE plus products contain 0.3% lidocaine, reducing pain during injection procedure.



#### [ Comparative experiment on the lidocaine release profile ]

YVOIRE plus releases lidocain faster for rapid onset of local anesthetic effect.



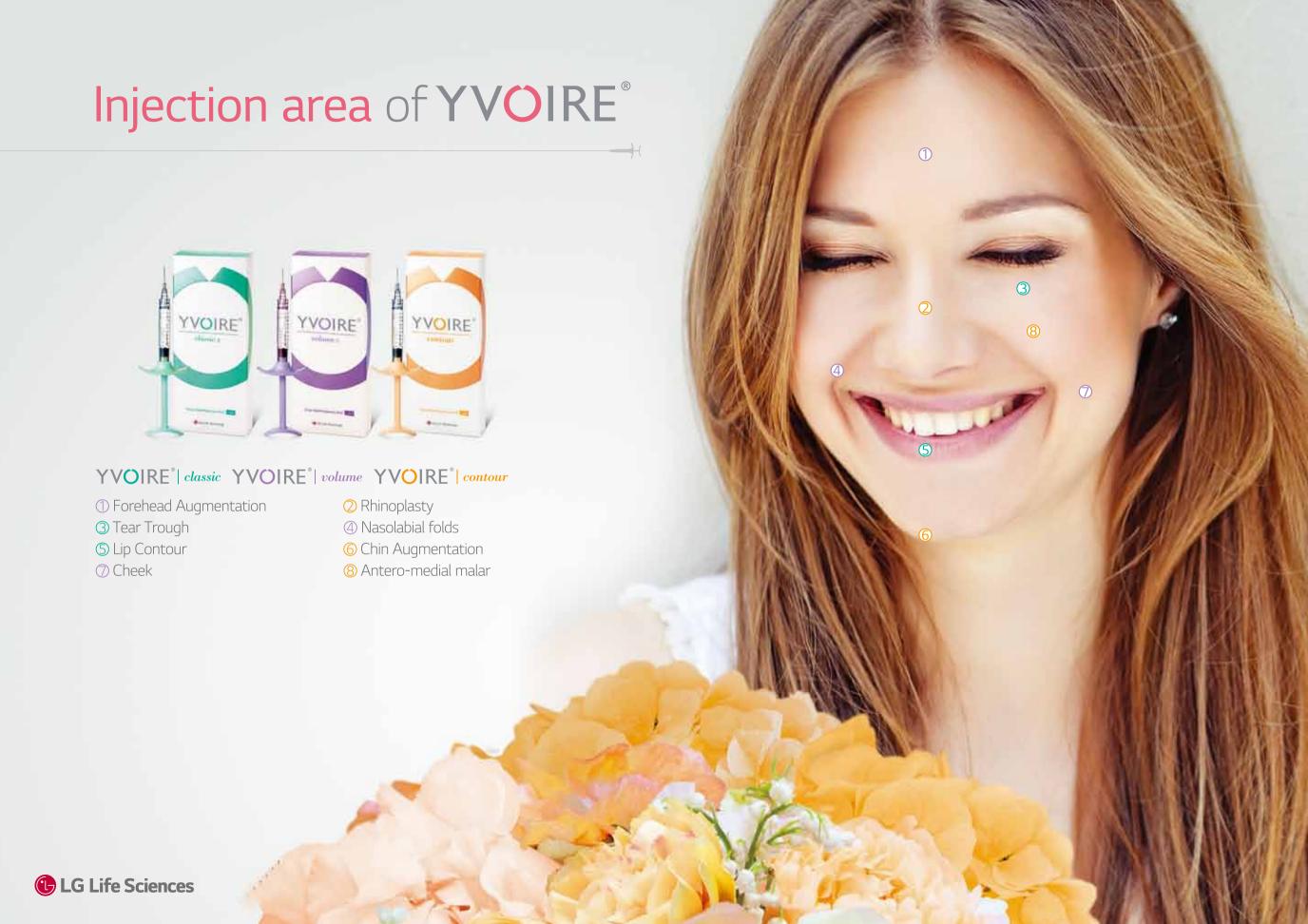
Release time(min, 1) Data on file



# Product Summary

YVOIRE provides diverse product options meeting needs of doctors and patients.

	YVOIRE® hydro	YVOIRE®   classic		YVOIRE®   volume		YVOIRE®   contour		
Product		classic s	classic plus	volume s	volume plus	contour	contour plus	
Purpose		Hydrolifting	Fine wrinkle correction & Volumizing		Deep wrinkle correction & Volumizing		Volumizing & Contouring	
Product image		YVOIRE auto	YVOIRE	YVOIRE share	YVOIRE	YVOIRE	YVOIRE	YVOIRE
Main particle size		-	400µm		900µm		1400µm	
Acid(H Composition		Cross-linked HA		linked HA	Cross-linked HA		Cross-linked HA	
	Hyaluronic Acid(HA)	Non cross-linked HA					•	
	lidocaine	-	-	0.3% lidocaine	_	0.3% lidocaine	-	0.3% lidocaine
Enclosed needles		30 G	30 G, 27 G		27 G		21G, 23G	23G, 23G cannula
Recommended injection layer		Superficial dermis	Mid dermis		Deep dermis		Subcutaneous dermis	
Volume per syringe		1 mL	1 mL	1 mL	1 mL	1 mL	2 mL	1 mL



## Company Introduction



### "Creating value for our customers"

We will continue to evolve as a trusted company.

#### **Electronics Sector**



Since 1958, when the company name was Gold Star Co., LG has led Korea's electronics industry with innovative technology. Through a deep commitment to research and development, global marketing, and innovation, LG has secured a market leading position, while continuously exploring new possibilities in the global electronics industry.

LG Electronics | LG Display | LG Siltron | LG Innotek | LUSEM

#### **Chemicals Sector**



Launched as Lucky Chemicals Industries Co. in 1947, the company espoused the management philosophy of "being committed to making products essential to people's lives". LG promises to show the highest values and standards to help in the everyday lives of our customers.

LG Chem | LG Household & Health Care | LG Life Sciences | LG Hausys | LG MMA |

### Telecommunications & Service Sector



This sector provides customers with better access to information anytime, anywhere. The key goal is to create a world that transcends communication networks.

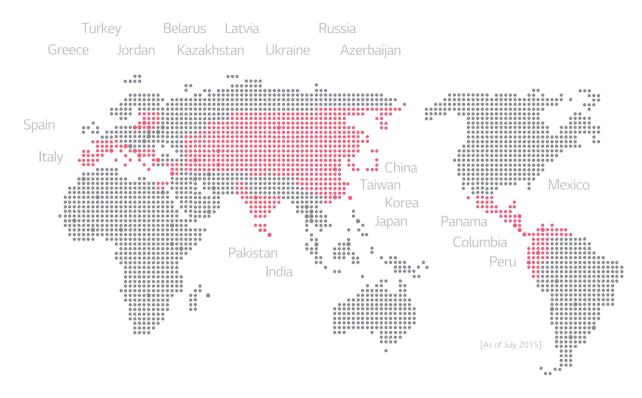
LG U<sup>+</sup> LG N-Sys LG CNS LG Sports LG International SERVEONE

### **LG Life Sciences**

LG Life Sciences, Ltd.,is a leading pharmaceutical company with global sales & marketing networks over 80 countries around the world.



# Why choose **YVOIRE**®



### YVOIRE® in the World

"YVOIRE is being exported worldwide to over 20 countries."



