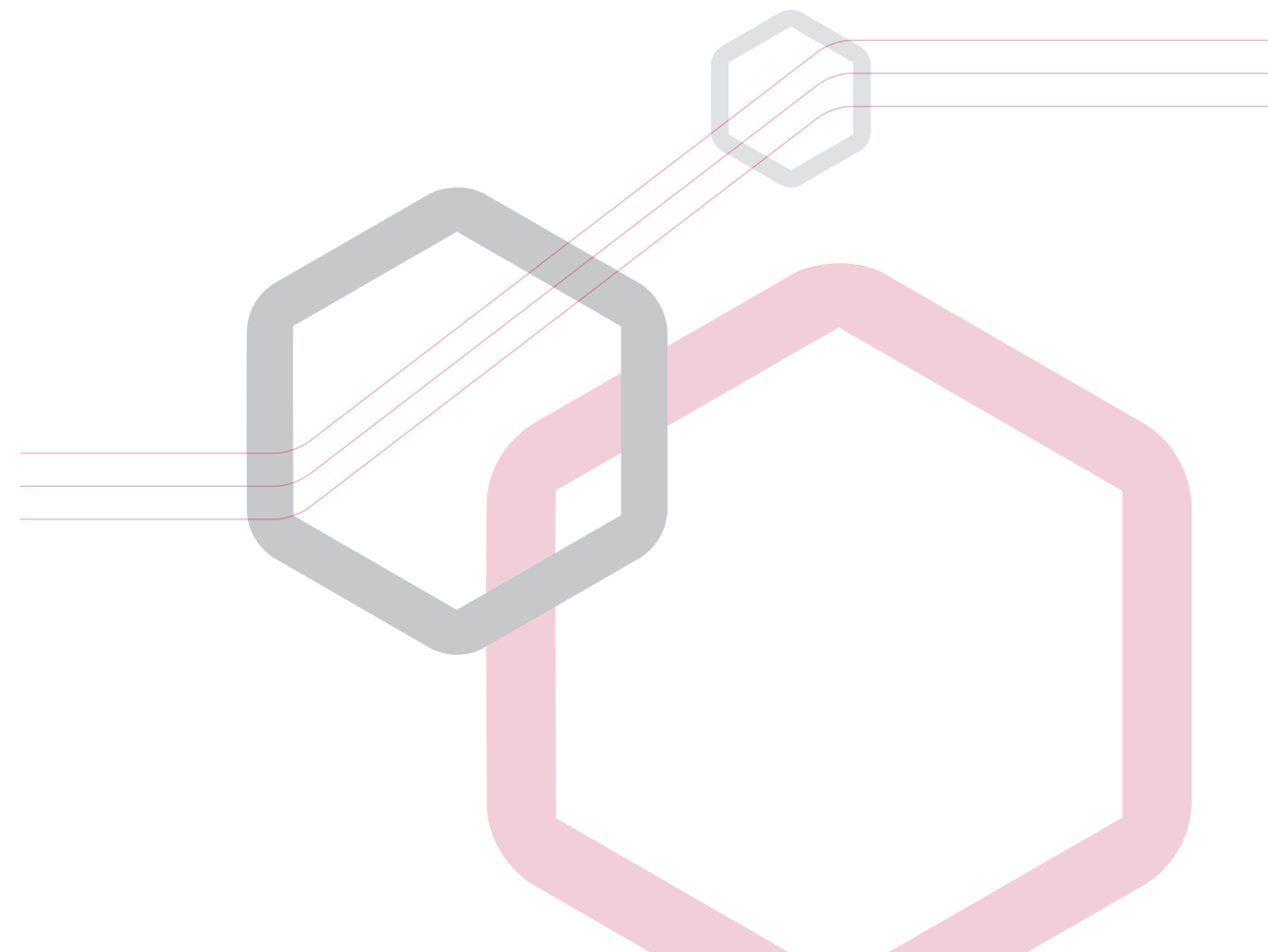




Innovation for a Better Life

# Life Sciences FACTSHEET



## HEADQUARTER

LG Twin Towers  
128 Yeoui-daero  
Yeongdeungpo-gu, Seoul, Korea

## Life Sciences company

E14 Block LG Science Park, 70,  
Magokjungang 10-ro  
Gangseo-gu, Seoul, Korea

Tel: +82-2-3773-1114  
[www.lgchem.com](http://www.lgchem.com)

# LG Corp.

Since its inception in 2003 as holdings company, LG has gone on to broaden its portfolio in electronics, chemicals, telecommunications, and service sectors while strengthening its expertise customer values in each field.

## 26 Chemicals

LG Chem  
LG Hausys  
LG Household & Healthcare  
etc.



## 17 Electronics

LG Electronics  
LG Display  
LG Innotek  
etc.



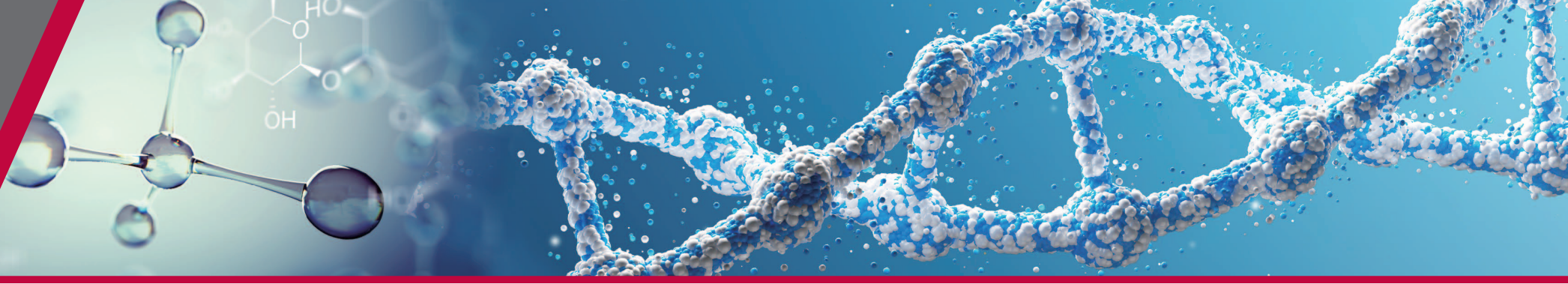
## 29 Telecommunication & service

LG U+  
LG CNS  
LG International  
Serveone  
etc.



# LG Chem

Business Area



## Petrochemicals

NCC  
PolyOlefins  
PVC / Plasticizers  
ABS  
Acrylates / SAP  
Rubber / Special Polymers

## Energy Solution

IT & New Application Battery  
Automotive Battery  
ESS Battery

## Advanced Materials

Automotive Material  
IT Materials  
Industrial Materials

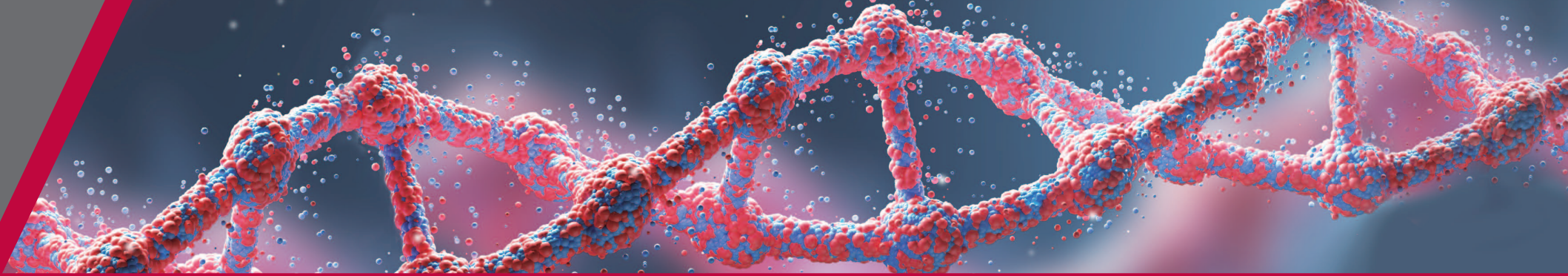
## Life Sciences

Primary Drug  
Specialty Drug  
Aesthetic



# Life Sciences

## History & Milestone



## Over 35 years of Experience in Biopharmaceutical Business

- 1981** Established as Biopharmaceutical Research Department
- 1990** In-house development and launch of 1<sup>st</sup> biopharmaceutical product (INTERMAX™-γ) in Korea
- 1996** 1<sup>st</sup> WHO prequalification of Hepatitis B vaccine (EUVAX B®) in Korea
- 2003** 1<sup>st</sup> NCE approved by US FDA (FACTIVE®) in Korea
- 2007** 1<sup>st</sup> biologics approved by US FDA & EMEA (VALTROPIN®) in Korea
- 2012** In-house development and launch of 1<sup>st</sup> diabetic drug (ZEMIGLO®) in Korea  
WHO prequalification of pentavalent vaccine (EUFORVAC- HIB™)
- 2016** WHO prequalified fully liquid pentavalent vaccine (EUPENTA™)
- 2018** 1<sup>st</sup> biosimilar (Eucept®) approved by PMDA in Japan

## Manufacturing Facility



### Headquarter

- Business Unit
- Clinical Dev.
- Regulatory Affairs



### Osong Plant

- Vaccine (WHO PQ) Production
- AID Production
- Future Product



### R&D center

- Vaccine Research
- Biological Research
- NCE Research
- Process & Formulation



### Onsan Plant

- Chemical API Production



### Iksan Plant

- HepB Vaccine (WHO PQ)
- Biological Drug Substance Production

# Life Sciences

## R&D Pipeline



## Pharmaceuticals

We have secured competitive edge in the pharmaceutical market, based on our superior technologies and R&D capabilities.

Based on our superior biotechnology and R&D capabilities accumulated since 1980s, we have been successful in developing a variety of original products including Korea's first growth hormone for children, new drugs for diabetes, etc. At the same time, we have continuously expanded our competitive edge through cooperation with global pharmaceutical companies.



## Development Pipeline

### New Drug

	Project Code	Indication	Research	Preclinical	Phase I	Phase II	Phase III	NDA	
<b>Metabolic Diseases</b>	LR19052	Diabetes	[Progress bar]						
	LR19054	Diabetes	[Progress bar]						
	LR19051	Diabetes	[Progress bar]						
	LR19123	Diabetes	[Progress bar]						
	LR19018	Diabetes	[Progress bar]						
	LR19074	Gout	[Progress bar]						
	LR19021	Obesity	[Progress bar]						
	LR19020	Obesity	[Progress bar]						
	LR19131	Metabolic disease	[Progress bar]						
<b>Oncology</b>	LR19127	Cancer	[Progress bar]						
	LR19125	Cancer	[Progress bar]						
	LR19129	Cancer	[Progress bar]						
	LR19031	Cancer	[Progress bar]						
	LR19023	Cancer	[Progress bar]						
<b>Immunology</b>	LR19055	Autoimmune disease	[Progress bar]						
	LR19019	Autoimmune disease	[Progress bar]						
	LR19025	Degenerative disease	[Progress bar]						
	LR19024	Degenerative disease	[Progress bar]						
	LR19030	Alopecia	[Progress bar]						

### Medical Device and Vaccine

	Project Code	Indication	Research	Preclinical	Phase I	Phase II	Phase III	NDA	
<b>Aesthetics</b>	LR19059 (China)	Dermal Filler	[Progress bar]						
	LR19059 (Europe)	Dermal Filler	[Progress bar]						
<b>Vaccine</b>	LR19113	Polio	[Progress bar]						
	LR19122	Diphtheriae, tetanus, pertussis, hepatitis B, meningitis, polio	[Progress bar]						
	LR19115	pneumococcus	[Progress bar]						

# Products

## Zemiglo<sup>®</sup> / Zemimet<sup>®</sup> SR / Zemiro<sup>®</sup> Tablet

Chemicals

### Zemiglo<sup>®</sup> Tablet

The optimized DPP-4 inhibitor having potent efficacy, reliable safety and better compliance benefits.



#### COMPOSITION

Each tablet contains 68.9mg gemigliptin tartrate sesquihydrate equivalent to 50mg of gemigliptin

#### INDICATION

As monotherapy or In combination with

- metformin as initial therapy in treatment naive patients inadequately controlled by diet and exercise alone.
- metformin in patients with inadequate glycemic control with the maximal tolerated dose of metformin alone.
- metformin and sulphonylurea in patients with inadequate glycemic control with the maximal tolerated dose of metformin and sulphonylurea dual therapy

#### DOSAGE & ADMINISTRATION

The recommended daily dose of Zemiglo<sup>®</sup> is 50mg. Zemiglo<sup>®</sup> can be taken with or without food.

No dosage adjustment is required for patients with renal impairment and mild or moderate hepatic impairment.

#### HOW SUPPLIED

Zemiglo<sup>®</sup> is available as clear blisters (PVC/PVDC and aluminum). Pack of 28 or 56 film-coated tablets in unit dose blisters.

#### STORAGE CONDITION

Store at room temperature (1~30°C) in tight container.

#### SHELF LIFE

48 months

### Zemimet<sup>®</sup> SR Tablet

Once daily DPP-IV inhibitor and Metformin SR combination product



#### COMPOSITION

Four-dosage tablets contain active ingredients respectively;

- 25/500mg : gemigliptin 25mg and metformin 500mg
- 50/1000mg : gemigliptin 50mg and metformin 1000mg
- 50/500mg : gemigliptin 50mg and metformin 500mg
- 25/1000mg : gemigliptin 25mg and metformin 1000mg

#### INDICATION

Zemimet<sup>®</sup> SR is indicated as an adjunct to diet and exercise to improve glycemic control in adults with type 2 diabetes mellitus. Zemimet<sup>®</sup> SR can be administered

- 1) As initial therapy for treatment naive patients with inadequate glycemic control by diet and exercise alone.
- 2) In patients with inadequate glycemic control with the maximal tolerated dose of metformin alone.

3) In combination with sulphonylurea in patients inadequately controlled on their maximal tolerated dose of metformin and a sulphonylurea.

4) In patients already receiving an identical combination of gemigliptin and metformin as separate tablets.

#### DOSAGE & ADMINISTRATION

The recommended dose of Zemimet<sup>®</sup>SR is once daily. Zemimet<sup>®</sup>SR should be generally administered once daily with a meal in the evening.

The maximum recommended daily dose is 50mg gemigliptin and 2000mg metformin extended-release.

#### HOW SUPPLIED

- 50/500mg : Zemimet<sup>®</sup> SR 50/500mg is oval shaped, orange colored, film-coated tablet
- 25/500mg : Zemimet<sup>®</sup> SR 25/500mg is oval shaped, yellow colored, film-coated tablet
- 50/1000mg : Zemimet<sup>®</sup> SR 50/1000mg is oblong shaped, brown colored, film-coated tablet
- 25/1000mg : Zemimet<sup>®</sup> SR 25/1000mg is oblong shaped, yellowish-brown colored, film-coated tablet

Opaque blisters (PVC/PVDC and aluminum). A pack of 28 or 56 film-coated tablets in unit dose blisters.

#### STORAGE CONDITION

Store at room temperature (1~30°C) in tight container.

#### SHELF LIFE

36 months

# Zemiglo<sup>®</sup> / Zemimet<sup>®</sup> SR / Zemiro<sup>®</sup> Tablet

Chemicals

## Zemiro<sup>®</sup> Tablet

DPP-IV inhibitor and Statin combination for concurrent treatment of diabetes and dyslipidemia



### COMPOSITION

Zemiro<sup>®</sup> is available as three doses which contain gemigliptin tartaric acid sesquihydrate and rosuvastatin calcium.

- 50/20 mg : gemigliptin 50 mg/rosuvastatin 20 mg
- 50/10 mg : gemigliptin 50 mg/rosuvastatin 10 mg
- 50/5 mg : gemigliptin 50 mg/rosuvastatin 5 mg

### INDICATION

Zemiro<sup>®</sup> is a combination of gemigliptin and rosuvastatin indicated for patients who require administration of both products.

### DOSAGE & ADMINISTRATION

Zemiro<sup>®</sup> is available as three doses 50/20 mg, 50/10 mg, 50/5 mg and taken once daily.

### HOW SUPPLIED

Zemiro<sup>®</sup> is available as a pack of 28 tablets and 56 tablets.

- 50/20 mg : Zemiro<sup>®</sup> 50/20 mg is a round-shaped, dark green-colored film-coated tablet.
- 50/10 mg : Zemiro<sup>®</sup> 50/10 mg is a round-shaped, light green-colored film-coated tablet.
- 50/5 mg : Zemiro<sup>®</sup> 50/5 mg is a round-shaped, yellowish green-colored film-coated tablet.

### STORAGE CONDITION

Store in room temperature (1-30°C)

### SHELF LIFE

30 months

# Rovatitan<sup>®</sup> Tablet

Chemicals

Once daily ARB and Statin SPC drug for simultaneous management of hypertension and dyslipidemia



### COMPOSITION

Six-dosage tablets contain active ingredients respectively;

- 5/80mg : rosuvastatin 5mg and valsartan 80mg
- 5/160mg : rosuvastatin 5mg and valsartan 160mg
- 10/80mg : rosuvastatin 10mg and valsartan 80mg
- 10/160mg : rosuvastatin 10mg and valsartan 160mg
- 20/80mg : rosuvastatin 20mg and valsartan 80mg
- 20/160mg : rosuvastatin 20mg and valsartan 160mg

### INDICATION

ROVATITAN<sup>®</sup> is indicated for the treatment of patients who must administer both rosuvastatin and valsartan.

### DOSAGE & ADMINISTRATION

Once-daily. Dosage must be individualized on the basis of both effectiveness and tolerance of valsartan and rosuvastatin.

### HOW SUPPLIED

- 5/80mg : light-orange colored, circular-shaped, film-coated tablet
- 5/160mg : light-orange colored, oval-shaped, film-coated tablet
- 10/80mg : pink colored, circular film-coated tablet
- 10/160mg : pink colored, oval film-coated tablet
- 20/80mg : brown colored, circular film-coated tablet
- 20/160mg : brown colored, oval film-coated tablet

### STORAGE CONDITION

Store at room temperature (1-30°C) in light-resistant tight container.

### SHELF LIFE

36 months

# Factive<sup>®</sup> Tablet / Injection

Chemicals

US FDA approved respiratory fluoroquinolone antibiotic, gemifloxacin.

Factive<sup>®</sup> is a dual targeting quinolone with broad spectrum marketed more than 20 countries including US. Intravenous formulation has been approved in Korea.

### COMPOSITION

Factive<sup>®</sup> Tablet : Each tablet contains gemifloxacin mesylate equivalent to 320mg of gemifloxacin

Factive<sup>®</sup> Injection : Each vial contains gemifloxacin mesylate equivalent to 200mg of gemifloxacin



### INDICATION, DOSAGE & ADMINISTRATION

Indication : Dose and duration of therapy depending on the type of indications are described in the following Table.

The dose of Factive<sup>®</sup> is 320mg (orally) or 200mg (as an intravenous injection) once every 24 hours.

Indication	Dose every 24 hours	Duration (days)
Acute bacterial exacerbation of chronic bronchitis	320 mg(oral), 200mg(IV)	5
Community-acquired pneumonia	320 mg(oral), 200 mg(IV)	7 to 14
Acute bacterial sinusitis	320 mg(oral), 200 mg(IV)	5 to 7
Otitis media	320 mg(oral), 200 mg(IV)	7
Complicated Urinary Tract Infections and Pyelonephritis	320mg(oral)	10
Uncomplicated urinary tract infections	320 mg(oral)	3

\*Different countries have different approved indication, formulation and duration.

### HOW SUPPLIED

Factive<sup>®</sup> tablet : white to off-white, oval, film-coated tablet  
Factive<sup>®</sup> injection : White to light brown lyophilized powder in a brown vial

### STORAGE CONDITION

Factive<sup>®</sup> tablet : Store at 1-30°C in tight container, Protect from light.

Factive<sup>®</sup> injection : Store at 1-30°C, Protect from light.

### SHELF LIFE

Factive<sup>®</sup> tablet : 48 months

Factive<sup>®</sup> injection : 36 months

# Eucept® Etanercept Injection

Biologics

The FIRST biosimilar of Etanercept ever developed by LG Chem.

Sophisticated analytical tools and methods are used to compare the characteristics of Eucept to the reference product on the very fine details of the molecule using the state-of-art technology. Head-to-head comparisons of Eucept and the reference product were performed in the clinical trials to demonstrate the safety and efficacy with active RA patients.

- Available in prefilled syringe and autoinjector
- Easy-to-grip autoinjector



## COMPOSITION

- Each prefilled syringe contains 25mg or 50mg of Etanercept
- Each autoinjector contains 50mg of Etanercept

## INDICATION

For adult patients (≥18 years old);

- a. Rheumatoid Arthritis (RA)
- b. Psoriatic Arthritis (PsA)
- c. Axial Spondyloarthritis (axSpA)
- d. Plaque Psoriasis (PsO)

## DOSAGE & ADMINISTRATION

For adult patients (≥18 years old);

- Rheumatoid arthritis, psoriatic arthritis, ankylosing spondylitis and non-radiographic axial spondyloarthritis  
25mg Etanercept administered twice weekly subcutaneously or 50mg administered once weekly subcutaneously.
- Plaque psoriasis  
25mg Etanercept administered twice weekly subcutaneously or 50mg administered once weekly subcutaneously. Alternatively, 50mg given twice weekly may be used for up to 12 weeks followed, if necessary, by a dose of 25mg twice weekly or 50mg once weekly. Treatment with Etanercept should continue until remission is achieved, for up to 24 weeks. Continuous therapy beyond 24 weeks may be appropriate for some adult patients. Treatment should be discontinued in patients who show no response after 12 weeks. If re-treatment with Etanercept is indicated, the same guidance on treatment duration should be followed. The dose should be 25mg twice weekly or 50mg once weekly. Based upon physician judgement and individual patient needs, continuous or intermittent treatment can be used. In intermittent treatment, after initial period of treatment, 25mg Etanercept administered twice weekly subcutaneously, or 50mg administered once weekly subcutaneously.

## HOW SUPPLIED

25mg/0.5mL prefilled syringe  
50mg/1.0mL prefilled syringe  
50mg/1.0mL autoinjector

## STORAGE CONDITION

- Store in a refrigerator (2°C–8°C). Do not freeze.
- Etanercept may be stored at temperatures up to a maximum of 25°C for a single period of up to four weeks; after which, it should not be refrigerated again. Etanercept should be discarded if not used within four weeks of removal from refrigeration.
- Keep the product in the outer carton in order to protect from light.

## SHELF LIFE

30 months

# Espogen® / Epotiv® Erythropoietin Injection

Biologics

Free from human serum albumin, manufactured by bioreactor process.

Espogen® is a recombinant human erythropoietin for the treatment of anemia induced by chronic renal failure in patients with or without dialysis. It is manufactured by bioreactor process which does not use animal-derived material, is free from human serum albumin.

- Recombinant human erythropoietin using CHO cells
- Manufactured by bioreactor process capable of covering high capacity
- Devoid of additives derived from animal origin in the manufacture process
- Safe and effective treatment for renal anemia associated with chronic renal failure (CRF)
- Newly developed for global market



## COMPOSITION

- Each pre-filled syringe contains 1,000, 2,000, 3,000, 4,000, 6,000, 8,000 or 10,000 IU of rhEPO
- Each vial contains 4,000, 10,000 or 20,000 IU of rhEPO

## INDICATION

Treatment of anemia of chronic renal failure(CRF) patients

## DOSAGE & ADMINISTRATION

- Initial dose : Administer 50 IU/kg, 3 times a week or 150 IU/kg once a week by SC or IV injection over 1-2 minutes
- Maintenance dose : If 30-35% of Hct level is achieved, administer 20-50 IU/kg, 2-3 times a week, in any case, maximum dose should not exceed 200IU/kg in a single day, 3 times per week.

## HOW SUPPLIED

Vial : 10 vials / box  
PFS : 6 syringes / box

## STORAGE CONDITION

Store in hermetic container at 2-8°C. Do not freeze or shake.

## SHELF LIFE

24 months



# Eutropin® / Eutropin® Pen Somatotropin Injection

Biologics

LG Chem is committed to leadership and innovation in GHD therapy.

- Manufactured using LG Chem's advanced technology : Drug substance approved by US FDA
- Uniquely produced in yeast (*Saccharomyces cerevisiae*) : GRAS by FDA hence, non-pathogenic and non-pyrogenic
- Proven quality : Proven efficacy and safety, 20 years of patient experience

## Eutropin® Injection 4 IU

### COMPOSITION

Each vial contains 4 IU of recombinant human growth hormone



## Eutropin® Pen Injection 36 IU

### COMPOSITION

Each pen contains 36 IU of recombinant human growth hormone



### INDICATION

Short stature due to an inadequate secretion of endogenous growth hormone in prepubertal children (Pediatric Growth Hormone Deficiency, PGHD)  
Short stature caused by Turner Syndrome (TS) in prepubertal children  
Short stature caused by Chronic Renal Insufficiency (CRI) in prepubertal children  
Short stature in prepubertal children born Small for Gestational Age (SGA)  
Short stature associated with Idiopathic Short Stature (ISS) in prepubertal children  
Replacement therapy in adults with GH deficiency of either childhood- or adult-onset etiology

### DOSAGE & ADMINISTRATION

1. PGHD : 0.5-0.6IU/kg/week or 12IU/m<sup>2</sup>(body surface area)/week, 3 or 6 times per week, subcutaneously.
2. TS : 1IU/kg/week, 6 to 7 times per week, subcutaneously or intramuscular.
3. CRI : 0.15IU/kg/day, subcutaneously.
4. SGA : 0.48mg/kg/week, 6 to 7 times per week, subcutaneously.
5. ISS : 0.37mg/kg/week, 6 times per week, subcutaneously.
6. Replacement therapy in adult GHD : A starting dose of 0.125IU/kg/week may be increased to a maximum 0.25IU/kg/week, 6 to 7 times per week.

### HOW SUPPLIED

4 IU/vial x 1, 5, 10 vials/pack (with solvent)  
15 IU/vial x 1 vial/pack (with solvent)  
36 IU/pen/pack

### STORAGE CONDITION

Store in hermetic container at 2-8°C.

### SHELF LIFE

4 IU : 36 months  
15 IU : 36 months  
36 IU : 18 months

# Eutropin® Plus Somatotropin Injection

Biologics

The FIRST once-a-week hGH product with proven efficacy and safety comparable to daily products. Satisfies needs of patient groups requiring reduced frequency of injections.

### COMPOSITION

Each vial contains 24mg of recombinant human growth hormone

### INDICATION

Short stature due to an inadequate secretion of endogenous growth hormone in prepubertal children (Pediatric Growth Hormone Deficiency, PGHD)

### DOSAGE & ADMINISTRATION

0.5mg/kg/week, subcutaneously.

### HOW SUPPLIED

24mg/vial with accompanying solvent in a pre-filled syringe/unit

### STORAGE CONDITION

Store at 2-8°C. Do not freeze. Keep out of reach of children.

### SHELF LIFE

36 months



# Declage® Somatotropin Injection

Biologics

Once weekly hGH product for AGHD (Adult Growth Hormone Deficiency) patients

### COMPOSITION

Each vial contains 3mg of recombinant human growth hormone

### INDICATION

Replacement therapy in adults with GH deficiency of either childhood- or adult-onset etiology

### DOSAGE & ADMINISTRATION

The recommended dosage at the start of therapy is 2mg/week. The dose may be increased according to individual patient requirements to a maximum of 4mg/week.

### HOW SUPPLIED

3mg/vial with accompanying solvent in a pre-filled syringe/unit

### STORAGE CONDITION

Store at 2-8°C. Do not freeze.

### SHELF LIFE

36 months



# Hyruan® Series

Viscosupplementation for osteoarthritis treatment

HA Based Products

Since early 1990s, LG's sodium hyaluronate is microbially fermented using *Streptococcus zooepidemicus* with high purity and consistency. To pursue the global standard, our hyaluronate gained Certificate of Suitability from European Directorate for the Quality of Medicines (EDQM).

## Treatment of degenerative joint diseases

Hyaluronic acid is a natural polysaccharide which moisturizes and lubricates the body's soft tissue. It protects injured chondrocyte by building proteoglycan aggregates and suppressing degenerative change of cartilage. It is the major macromolecule species in synovial fluid and is responsible for the fluid's viscoelastic properties.

## Hyruan ONE®

Novel single injection with cross-linked HA



### COMPOSITION

Each mL contains 20mg of cross-linked sodium hyaluronate

### INDICATION

For use as a symptomatic treatment for osteoarthritis of the knee

### DOSAGE & ADMINISTRATION

3.0mL at once by intra-articular injection

### HOW SUPPLIED

3.0mL in a prefilled syringe/box

### STORAGE CONDITION

Store in hermetic container at 1-30°C. Protect from light.

### SHELF LIFE

24 months

## Hyruan Plus®

Three-injection with high molecular weight HA



### COMPOSITION

Each mL contains 10mg of sodium hyaluronate

### INDICATION

Osteoarthritis of the knees and peri-arthritis of the shoulder

### DOSAGE & ADMINISTRATION

2.0mL once a week for 3 weeks by intra-articular injection

### HOW SUPPLIED

2.0mL in a prefilled syringe X 1, 3/box

### STORAGE CONDITION

Store in hermetic container at 2-25°C. Protect from light.

### SHELF LIFE

24 months

## Hyruan®

Five-injection with low molecular weight HA



### COMPOSITION

Each mL contains 10mg of sodium hyaluronate

### INDICATION

Osteoarthritis of the knees and peri-arthritis of the shoulder

### DOSAGE & ADMINISTRATION

2.5mL once a week for 5 weeks by intra-articular injection

### HOW SUPPLIED

2.5mL in a prefilled syringe X 1, 5/box

### STORAGE CONDITION

Store in hermetic container at 2-8°C in the refrigerator. Protect from light.

### SHELF LIFE

36 months

# Protescal™

Post-operative anti-adhesive agent

HA Based Products

It is a biodegradable and absorbable adhesion barrier composed of sodium hyaluronate, carboxymethylcellulose (CMC) and sodium alginate. It effectively prevents the formation of adhesions between tissues after intrauterine surgery and degrades safely in our body.

### DESCRIPTION

This is a viscous solution type product presented in a prefilled syringe filled with 1.5mL, 5.0mL of colorless, clear and viscous liquid.

### INDICATION

It is mainly used after the intrauterine surgery to reduce the adhesion of the surrounding tissues as a dressing for deep cavity wounds.

### HOW SUPPLIED

1.5mL, 5.0mL in a prefilled syringe/box

### STORAGE CONDITION

2-25°C, Free from light, in a hermetic container.

### SHELF LIFE

24 months



# Hyal® Series

Injection for ophthalmic surgery

HA Based Products

Hyal 2000® and Hyal Plus® are sodium hyaluronate, which are sterile non-pyrogenic high molecular weight viscoelastic substances for intraocular surgeries. They protect the endothelium from injury, enhance endogenous endothelial regeneration and allow safe manipulation during ophthalmic surgeries.

## Hyal Plus®

### COMPOSITION

Each mL contains 15mg of sodium hyaluronate

### INDICATION

Used in surgical interventions involving the anterior chamber, such as cataracts (crystalline lens transplants), corneal transplants and glaucoma operations

### DOSAGE & ADMINISTRATION

Injection volume is adjusted according to the type of eye surgery:

- Cataract Surgery and Intraocular Lens Implantation
- Keratoplasty
- Glaucoma Filtration Surgery

### HOW SUPPLIED

0.85mL in a prefilled syringe/box

### STORAGE CONDITION

Store in hermetic container at 2-8°C in the refrigerator. Protect from light.

### SHELF LIFE

36 months



## Hyal 2000®

### COMPOSITION

Each mL contains 10mg of sodium hyaluronate

### INDICATION

Used in surgical interventions involving the anterior chamber, such as cataracts (crystalline lens transplants), corneal transplants and glaucoma operations

### DOSAGE & ADMINISTRATION

Injection volume is adjusted according to the type of eye surgery:

- Cataract Surgery and Intraocular Lens Implantation
- Keratoplasty
- Glaucoma Filtration Surgery

### HOW SUPPLIED

0.85mL in a prefilled syringe/box

### STORAGE CONDITION

Store in hermetic container at 2-8°C in the refrigerator. Protect from light.

### SHELF LIFE

36 months



# YVOIRE® Dermal Filler

HA Based Products

## Tissue augmentation and wrinkle correction

Based on the original technology for manufacturing high-quality sodium hyaluronate, LG Chem developed a biomaterial for tissue augmentation using the cross-linked sodium hyaluronate. It is injected into the facial skin layer in the face using separate needles supplied with. YVOIRE® series use HICE(High Concentration Equalized) crosslinking technology which effectively stabilizes high concentration, high molecular weight HA.

## YVOIRE® classic s

### COMPOSITION

Cross-linked sodium hyaluronate 22mg/mL(2.2%)

### INDICATION

Facial tissue augmentation by injection into areas in which restoration is required. Typically used for treatment of facial wrinkles and folds, and also for augmentation of lips.

### HOW SUPPLIED

1.0mL in a prefilled syringe/box with 27G & 30G needles

### STORAGE CONDITION

2-25°C free from light, in a hermetic container.

### SHELF LIFE

24 months



## YVOIRE® classic plus

### COMPOSITION

Cross-linked sodium hyaluronate 20mg/mL (2.0%)  
Lidocaine hydrochloride 0.3%

### INDICATION

Facial tissue augmentation by injection into areas in which restoration is required. Typically used for treatment of facial wrinkles and folds, and also for augmentation of lips. The addition of lidocaine provides a pain relieving effect during treatment.

### HOW SUPPLIED

1.0mL in a prefilled syringe/box with 27G & 30G needles

### STORAGE CONDITION

2-25°C free from light, in a hermetic container.

### SHELF LIFE

24 months



## YVOIRE® volume s

### COMPOSITION

Cross-linked sodium hyaluronate 22mg/mL(2.2%)

### INDICATION

Facial tissue augmentation by injection into areas in which restoration is required. Typically used for treatment of severe facial wrinkles and folds, and also for augmentation of lips.

### HOW SUPPLIED

1.0mL in a prefilled syringe/box with two 27G needles

### STORAGE CONDITION

2-25°C free from light, in a hermetic container.

### SHELF LIFE

24 months



## YVOIRE® volume plus

### COMPOSITION

Cross-linked sodium hyaluronate 20mg/mL (2.0%)  
Lidocaine hydrochloride 0.3%

### INDICATION

Facial tissue augmentation by injection into areas in which restoration is required. Typically used for treatment of severe facial wrinkles and folds, and also for augmentation of lips. The addition of lidocaine provides a pain relieving effect during treatment.

### HOW SUPPLIED

1.0mL in a prefilled syringe/box with two 27G needles

### STORAGE CONDITION

2-25°C free from light, in a hermetic container.

### SHELF LIFE

24 months



# YVOIRE® Dermal Filler

HA Based Products

## YVOIRE® contour s

### COMPOSITION

Cross-linked sodium hyaluronate 22mg/mL (2.2%)

### INDICATION

Facial tissue augmentation typically used for treatment of extreme facial wrinkles and folds, and also replacement of volume defects, facial lipoatrophy and improvement of facial contour deformities by injection in the facial subcutaneous and supraperiosteal facial layers

### HOW SUPPLIED

2.0mL in a prefilled syringe/box with 21G & 23G needles

### STORAGE CONDITION

2-25°C free from light, in a hermetic container.

### SHELF LIFE

24 months



## YVOIRE® contour plus

### COMPOSITION

Cross-linked sodium hyaluronate 20mg/mL (2.0%)  
Lidocaine hydrochloride 0.3%

### INDICATION

Temporary wrinkle improvement and recovery of volume loss by injection into the facial skin layer  
The addition of lidocaine provides a pain relieving effect during treatment.

### HOW SUPPLIED

1.0mL in a prefilled syringe/box with 23G cannula & 23G needle

### STORAGE CONDITION

2-25°C free from light, in a hermetic container.

### SHELF LIFE

24 months



## YVOIRE® hydro

### COMPOSITION

Sodium hyaluronate 20mg/mL (2.0%)

### INDICATION

Temporary relief of wrinkles by injection into the skin layer around the facial wrinkle area

### HOW SUPPLIED

1.0mL in a prefilled syringe/box with two 30G needles

### STORAGE CONDITION

2-8°C

### SHELF LIFE

24 months



# YVOIRE® Y-Solution™ Dermal Filler

HA Based Products

## YVOIRE® Y-Solution™ 360

### COMPOSITION

Cross-linked sodium hyaluronate 12mg/mL(1.2%)  
Lidocaine hydrochloride 0.3%

### INDICATION

Temporary wrinkle improvement and recovery of volume loss by injection into the facial skin layer  
The addition of lidocaine provides a pain relieving effect during treatment.

### HOW SUPPLIED

1.0mL in prefilled syringe/box with two 29G needles

### STORAGE CONDITION

2-25°C free from light, in a hermetic container.

### SHELF LIFE

17 months



## YVOIRE® Y-Solution™ 540

### COMPOSITION

Cross-linked sodium hyaluronate 20mg/mL(2.0%)  
Lidocaine hydrochloride 0.3%

### INDICATION

Temporary wrinkle improvement and recovery of volume loss by injection into the facial skin layer  
The addition of lidocaine provides a pain relieving effect during treatment.

### HOW SUPPLIED

1.0mL in prefilled syringe/box with two 27G needles

### STORAGE CONDITION

2-25°C free from light, in a hermetic container.

### SHELF LIFE

17 months



## YVOIRE® Y-Solution™ 720

### COMPOSITION

Cross-linked sodium hyaluronate 20mg/mL(2.0%)  
Lidocaine hydrochloride 0.3%

### INDICATION

Temporary wrinkle improvement and recovery of volume loss by injection into the facial skin layer  
The addition of lidocaine provides a pain relieving effect during treatment.

### HOW SUPPLIED

1.0mL in prefilled syringe/box with two 27G needles

### STORAGE CONDITION

2-25°C free from light, in a hermetic container.

### SHELF LIFE

17 months



# Follitrope® Injection 75, 150, 225, 300 IU

Infertility Treatments

Recombinant Human Follitropin (FSH) lyophilized powder in vial and liquid formulation in prefilled syringe for injection.



### COMPOSITION

Each vial contains 75 or 150 IU of recombinant follitropin (FSH). Each prefilled syringe contains 75,150, 225 or 300 IU of recombinant follitropin (FSH).

### INDICATION

Controlled ovarian hyperstimulation (COH) to induce the development of multiple follicles in medically assisted reproduction program (e.g. in vitro fertilization/embryo transfer; IVF/ET, gamete intra-fallopian transfer; GIFT, zygote intra-fallopian transfer; ZIFT, intracytoplasmic sperm injection; ICSI). Anovulation in clomiphene-resistant anovulatory infertility women (WHO Group II, including polycystic ovarian disease (PCOD)).

### ADMINISTRATION

Subcutaneous or intramuscular injection

### HOW SUPPLIED

- Follitrope® Inj. vial :  
75 IU 1 vial per pack (with its accompanying solvent in vial)  
150 IU 1, 5 vials per pack (with its accompanying solvent in vial)
- Follitrope® Inj. prefilled syringe :  
75, 150, 225, 300 IU 1 prefilled syringe/pack

### STORAGE CONDITION

- Follitrope® Inj. vial :  
Store below 25°C in hermetic container protected from light.
- Follitrope® Inj. prefilled syringe :  
Store between 2-8°C in hermetic container protected from light.
- Avoid freezing.

### SHELF LIFE

36 months

# IVF-M HP™ Injection 75 IU

Infertility Treatments

IVF-M HP™ Injection is a preparation of highly purified human menopausal gonadotropin (Menotropin HP) extracted from the urine of postmenopausal women, which contains follicle stimulating hormone(FSH) and luteinizing hormone (LH) activity in the ratio of approximately 1.



### COMPOSITION

Each vial contains 75 IU of FSH and 75 IU of LH

### INDICATION

Female : For stimulation of the development of multiple follicles(superovulation) in women undergoing Assisted Reproductive Techniques(ART),  
For ovulatory disorder - Ovulation induction

### ADMINISTRATION

Subcutaneous injection

### HOW SUPPLIED

75 IU/vial X 1 vial/pack (with solvent)

### STORAGE CONDITION

Store in the light-resistant place at RT (1-30°C).

### SHELF LIFE

36 months

## IVF-M™ Injection 75,150 IU

Infertility Treatments

IVF-M™ Injection is a preparation of human menopausal gonadotropin (Menotropin) extracted from the urine of postmenopausal women, which contains follicle stimulating hormone (FSH) and luteinizing hormone (LH) activity in the ratio of approximately 1.

### COMPOSITION

Each vial contains 75 or 150 IU of FSH and 75 or 150 IU of LH

### INDICATION

**Female :** For stimulation of the development of multiple follicles (superovulation) in women undergoing Assisted Reproductive Techniques (ART),  
For ovulatory disorder - Ovulation induction

Male : Hypogonadotropic hypogonadism

### ADMINISTRATION

Subcutaneous or intramuscular injection

### HOW SUPPLIED

75 IU/vial X 1 vial/pack (with solvent)  
150 IU/vial X 1, 5 vials/pack (with solvent)

### STORAGE CONDITION

Store in the light-resistant place at RT (1-30°C).

### SHELF LIFE

36 months



## IVF-C™ Injection 1000, 5000 IU

Infertility Treatments

IVF-C™ Injection is a preparation of human chorionic gonadotropin (hCG) extracted from the urine of pregnant women.

### COMPOSITION

Each vial contains 1,000 or 5,000 IU of hCG

### INDICATION

**Female :** Ovulation induction in women undergoing Assisted Reproductive Techniques (ART), Anovulatory Infertility, Inadequate Luteal Phase, Habitual Abortion & Threatened abortion

Male : Hypogonadotropic hypogonadism

### ADMINISTRATION

Intramuscular injection

### HOW SUPPLIED

1,000 IU/vial X 1 vial/pack (with solvent)  
5,000 IU/vial X 1, 3 vials/pack (with solvent)

### STORAGE CONDITION

Store in the light-resistant cool place (below 15°C).

### SHELF LIFE

24 months



## Euvax B™ Injection

Hep B Vaccine

Recombinant hepatitis B vaccine suspension for injection

Highly qualified, safe and effective

- Prequalified by WHO (first in Korea) & Certified as EU GMP
- Major supplier of UN Agencies
- Produced by recombinant DNA technology expressed in yeast cell (*Saccharomyces cerevisiae*)
- Free from components of human origin
- Over 600 million doses have been used worldwide
- Effective protection in all age groups with a variety of vaccination schedules
- Preservative free composition



### CLASS

Monovalent Vaccine

### COMPOSITION

Each ml of Euvax B™ Inj. contains

Active ingredient : Purified HBsAg (rDNA) 10 or 20 µg  
Adjuvant : Aluminum hydroxide gel (as Al) 0.5 mg

### INDICATION

Immunization against infection caused by all known subtypes of hepatitis B virus

### DOSAGE & ADMINISTRATION

0.5 ml (10 µg HBsAg) is administered to neonates, infants and children aged up to 15 years and 1.0 ml (20 µg HBsAg) is administered to adult aged from 16 years, by intramuscular injection

- Basic immunization schedule : 0-1-6 months
- Alternate immunization schedule : 0-1-2 months

### STORAGE CONDITION

Store at 2-8°C. Do not freeze.

### SHELF LIFE

36 months

## Euhib™ Injection

Hib Vaccine

Haemophilus influenzae type b (Hib) vaccine  
Lyophilized powder with a diluent in pre-filled syringe for injection

High-tech, effective and safe

- The first Hib tetanus toxoid conjugate vaccine to be developed with second-generation conjugate technology in Korea
- One of the Korea's 10 Best New Technologies of 2011
- Awarded a prize from Minister of Knowledge Economy
- Highly immunogenic and well tolerable to the healthy infants
- Preservative free composition



### CLASS

Monovalent Vaccine

### COMPOSITION

Each single dose of 0.5ml contains

Lyophilized powder :	
- Purified capsular polysaccharide (PRP) of Hib conjugated to tetanus toxoid	30-50µg (as PRP 10 µg)
- Lactose	10.08 mg
Diluent :	
- Sodium chloride	0.9% (w/v)
- Water for injection	q.s.

### INDICATION

Active immunization of infants and toddlers from the age of 2 months for prevention of invasive disease caused by Haemophilus influenzae type b

### DOSAGE & ADMINISTRATION

3 doses (1 dose = 0.5 ml) at 2, 4 and 6 months of age and a booster dose of 0.5 ml at 12-15 months of age, by intramuscular injection

### STORAGE CONDITION

Store at 2-8°C. Do not freeze.

### SHELF LIFE

36 months

# Eupenta™ Injection

DTwP-Hep B-Hib

Adsorbed Diphtheria, Tetanus, whole-cell Pertussis, Hepatitis B (r-DNA) and Hib vaccine Suspension for injection

Effective, safe and convenient

- Highly immunogenic and well tolerable to the healthy infants
- Improved compliance
- Long shelf life
- Manufactured under world-class GMP standards



## CLASS

Pentavalent Vaccine

## COMPOSITION

Each single dose of 0.5mL contains

Diphtheria toxoid	15 Lf
Tetanus toxoid	10 Lf
Pertussis antigen	≥ 4 IU
Purified HBsAg (r-DNA)	10 µg
Purified capsular polysaccharide (PRP) of Hib conjugated to tetanus toxoid	30-50 µg (as PRP 10 µg)

## INDICATION

Active primary immunization against diphtheria, tetanus, pertussis, hepatitis B and Haemophilus influenzae type b disease

## DOSAGE & ADMINISTRATION

3 doses (1 dose = 0.5ml) at 6, 10 and 14 weeks of age, by intramuscular injection

## STORAGE CONDITION

Store at 2~8°C. Do not freeze.

## SHELF LIFE

36 months

The largest Convergence R&D Complex in Korea

# LG Sciencepark



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