03

R&D Innovation

Jae-uk Jeong, Head of R&D

GC Biopharma

2025 Key achievement

Value Creation

5

✓ **IND Approvals[1]: 3 Domestic, 2 Global**
- Project: 3 Vaccine, 1 Rare disease

2

✓ **Domestic product approval and application**
- Anthrax vaccine approved
- Hunterase ICV approval application submitted

9

✓ **Overseas product approval[2]**
- Based on 3 key products:
  Hunterase, BARYCELA Inj., GC FLU

Strengthen Competency

✓ **Pipeline expansion with new modalities**
- mRNA/LNP Platform: COVID-19 vaccine
- ADC: Joint research through open innovation

✓ **Securing innovative technologies**
- Patent applications: 10case (↑ 1.5x vs. 2024)
- Publications in international journals (↑ 2x vs. 2024)

✓ **Enhancing of organizational expertise and efficiency**
- Improved execution by strengthening the RRC decision-making system
- Enhanced early-stage research expertise through the MDD

1) BARYCELA Inj.(2-dose) Thailand Phase 3, COVID-19 vaccine Domestic Phase 1, Tdap vaccine Domestic Phase 1/2, Fabry treatment Domestic·Argentina Phase 1/2
2) Hunterase 3 cases(Libya, Malaysia, Paraguay), BARYCELA Inj. 3cases(Vietnam, Libya, Egypt), GC flu 3cases(Libya, Philippines, Lebanon)

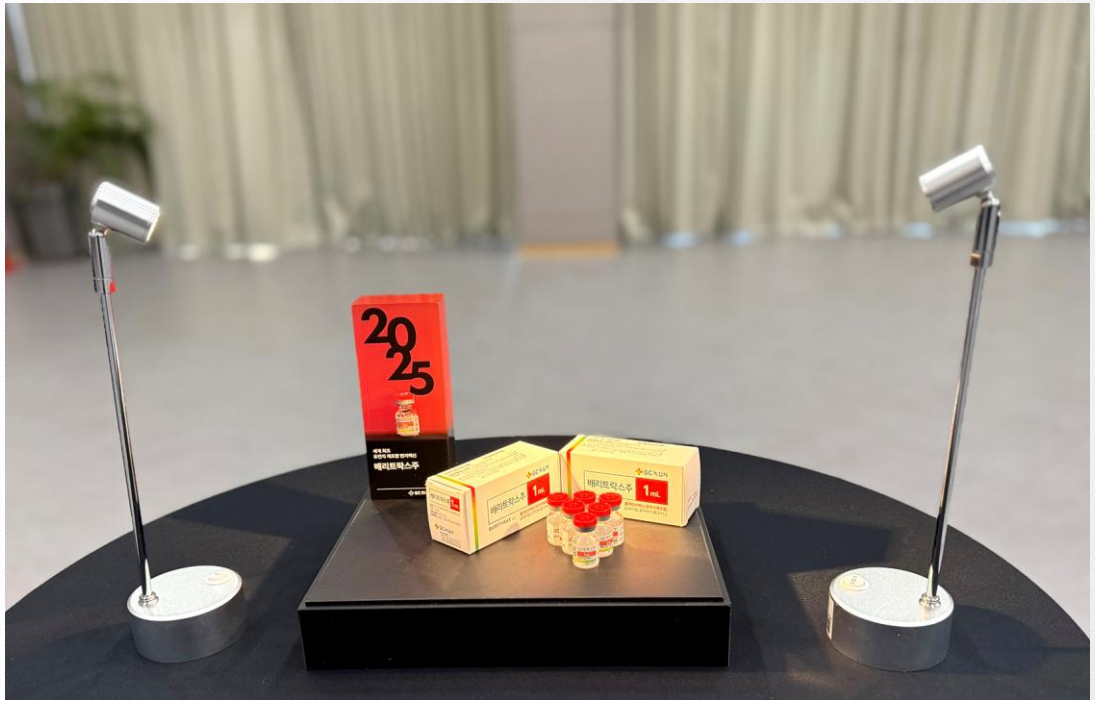
‘BARYTHRAX inj.’, winning the ‘Grand’ prize at Korea New Drug Award

Korean
39th new drug
& 3rd new vaccine

World’s first
recombinant
Anthrax vaccine

Global competitiveness
with differentiated safety
compared to traditional vaccine





R&D Strategy: 2 strategic wings with 4 main pillars

Plasma derivatives

- ✓ Alyglo®: Successful landing in US market and revenue expansion
- ✓ Yield improvement with new process and development of SCIG

Rare diseases

- ✓ MPSIIIA Phase 1 LPI
- ✓ Fabry Phase 1/2 Cohort 1 enrollment completed
- ✓ Securing ODD of MPSIIIA, Fabry treatment



Vaccines

- ✓ Established core
  : Strengthening global competitiveness
- ✓ Growth Drives
  : Anthrax vaccine approval
  : Development of premium vaccines

Immune-based innovative medicines

- ✓ Open Innovation
  : Initiation of ADC co-development
- ✓ Launch of 6 new projects in 2024 and 4 new programs in 2025[1)]

1) 2024: Chronic respiratory inflammation, Inflammatory bowel disease, Chronic respiratory inflammation, ICI-refractory solid cancers, Advanced solid cancers, Advanced solid cancers
2025: Fibrosis, Inflammation disease, Cystic fibrosis, Synthetic lethality-based cancer

Strengthening global R&D competitiveness by expanding pipelines

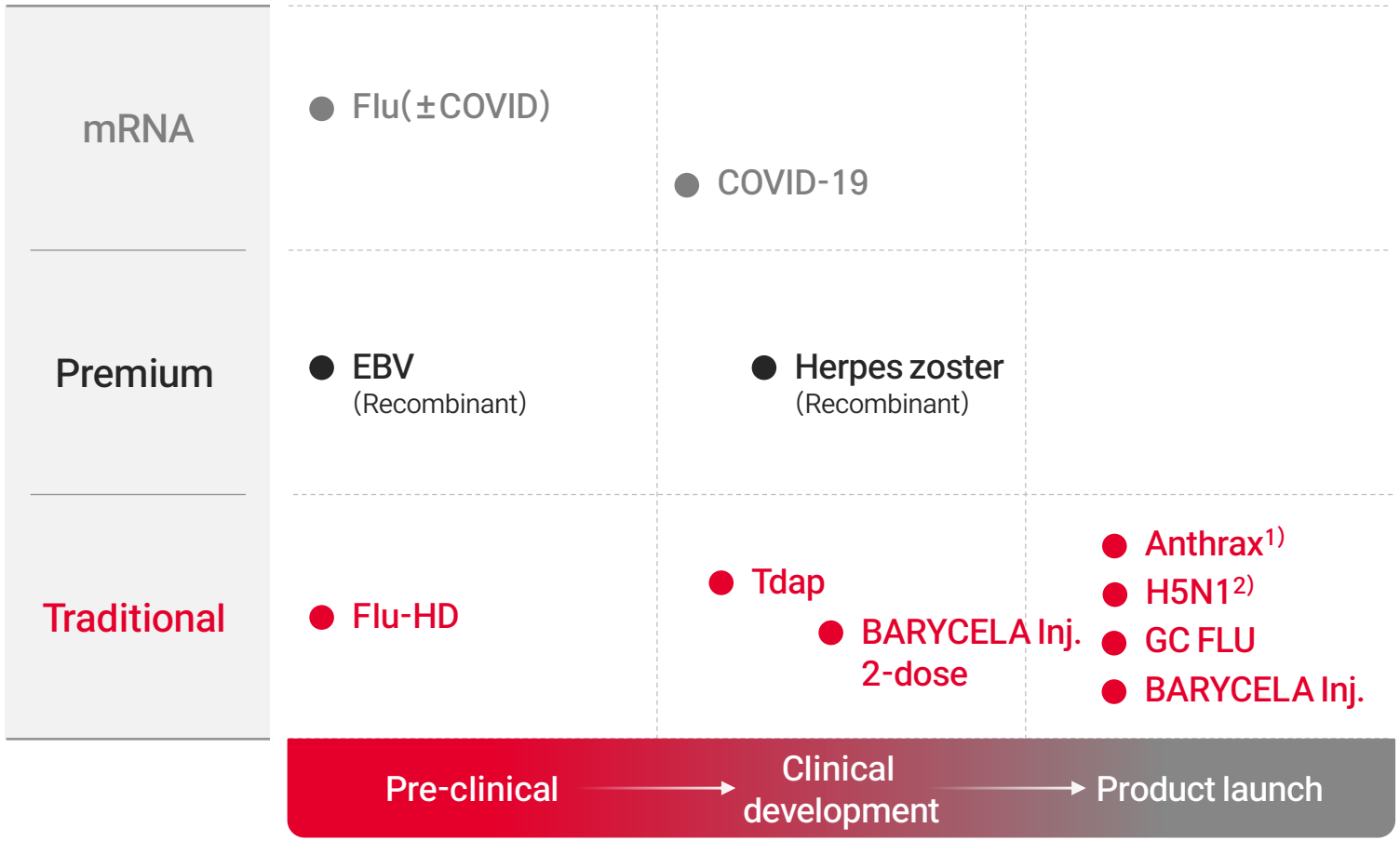
Foundation building & Capability Accumulation — Growth acceleration & Value realization

			2023	2024	2025	2026	2027	2028
Plasma derivatives	Global	Alyglo®	US FDA approval	Revenue $36M	Revenue $106M	US Pediatric Ph3 completed	Pediatric indication expansion[1]	
	Global	PI treatment(SC)				Preclinical / facility investment	US Ph3 IND approval	
Vaccines		BARYTHRAX inj.			KR product approval			
	Global	BARYCELA Inj.	WHO PQ certification	RU Ph3 IND approval	VN product approval			
	Global	BARYCELA Inj.(2-dose)			TH Ph3 IND approval	KR/VN Ph3 IND approval		TH/VN regulatory submission
		Tdap vaccine			KR Ph1/2 IND approval		Ph3 IND approval	
		Flu-HD vaccine				KR Ph2/3 IND approval		
		mRNA COVID vaccine			KR Ph1 IND approval	Ph2 IND approval	Ph3 IND approval	Regulatory submission
	Global	EBV vaccine				Preclinical[2]	Ph1 IND approval[3]	
Innovative medicine	Global	Hunterase(IV)	KR: Conversion to Full Approval					
	Global	Hunterase(ICV)		RU product approval	KR Ph1 completed, Regulatory submission			
	Global	MPSIIIA treatment		US/KR Ph1 IND approval		US/KR Ph2/3		
	Global	Fabry treatment		US Ph1/2 IND approval	KR/AR Ph1/2 IND approval	US/KR/AR Cohort 2	US/KR/AR Cohort 3	
	Global	Immune-based innovative medicines		6 new projects initiation	2 new projects +ADC project initiation	ADC preclinical[2] +new α projects		

1) Expansion of pediatric indications, 2) Toxicity, 3) Target countries to be finalized in the second half of 2026

Vaccine portfolio updates

Vaccine portfolio



2025 Achievements and 2026 Goal

- ✓ Regulatory approval for Anthrax vaccine (BARYTHRAX®) in Korea
- ✓ IND approval for Tdap Vaccine(KR Phase 1/2)
- ✓ IND approval for Covid-19 vaccine(KR Phase1)
  - Phase 2 initiation planned within the year
- ✓ BARYCELA Inj.
  - 3 countries approved; targeting 4 countries in 2026
  - TH Phase 3(2-dose) IND approved
  - KR&VN Phase 3 IND targeted within the year
- ✓ GC FLU
  - 3 countries approved; targeting 4 countries in 2026

1) Product name: BARYTHRAX inj., 2) Prodcut name: GCFLU H5N1multi inj.

Market expansion via dosing strategy based on existing vaccine and value enhancement

BARYCELA Inj. 2-dose: Entering market in 2028

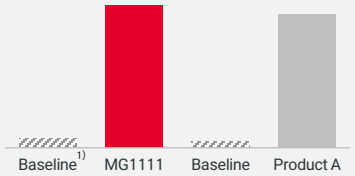
1 'MAV/06' WHO Position Paper publication

World Health Organization

Officially recognized interchangeability with OKA based vaccine

Strengthening status in global PAHO procurement market

2 Secured interim results for Phase 2 domestic clinical trial



Confirmed immunogenicity equivalent to global competitors

3 Timeline of BARYCELA Inj. 2-dose

2026	2027	2028	Commercialization
VN/KR Ph3 IND approval	TH/VN Ph3 completed	TH/VN product approval	

Varicella and Influenza vaccine

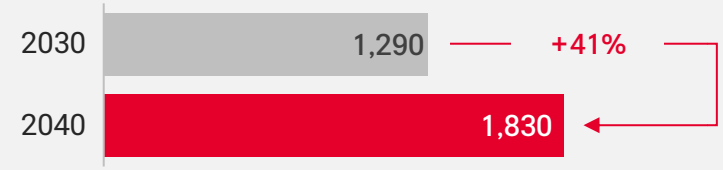
BARYCELA Inj. 2-dose

High-dose Flu vaccine



High-dose Flu vaccine: Targeting domestic product approval in 2029

1 High-dose flu vaccine market outlook in KR 2)



2 Initiating Ph 2/3 for trivalent vaccine based on high-dose quadrivalent vaccine Ph2 results

Safety and efficacy evaluation planned for healthy elderly individuals aged 65 and older

Domestic: Phase 2

Global: Phase 3

3 Timeline of high-dose flu vaccine

2026	2027	2028	2029	commercialization
KR Ph 2/ 3 IND approval	ROW Ph 3 IND approval	Product approval submission in KR	Product approval l in KR	

1) Visit 1(Pre-dose), 2) Research statistics from MOIS, estimated population from KOSTAT(Unit: 10,000 Doses)

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Portfolio enhancement with a differentiated antigen-based EBV Vaccine

EBV vaccine: Best-in-Class

Development of a vaccine to prevent EBV-induced infectious mononucleosis

- EBV remains latent for life, increasing the risk of infectious diseases, autoimmune diseases, and cancers
- Secured proprietary antigens for a subunit vaccine to prevent infection ; entered preclinical stage (Jan 2026)

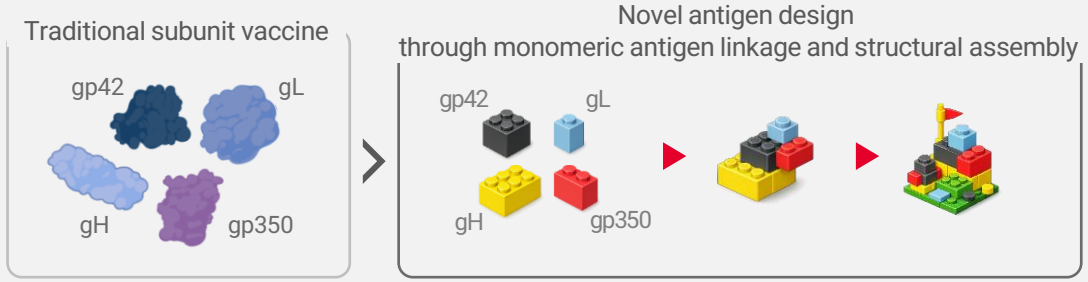
Infectious Mononucleosis[1] (US)	Multiple Sclerosis[2] (US)	EBV-related cancers[3] (Global)
1 million ↑	10,000–20,000	200,000 cases ↑

Market potential

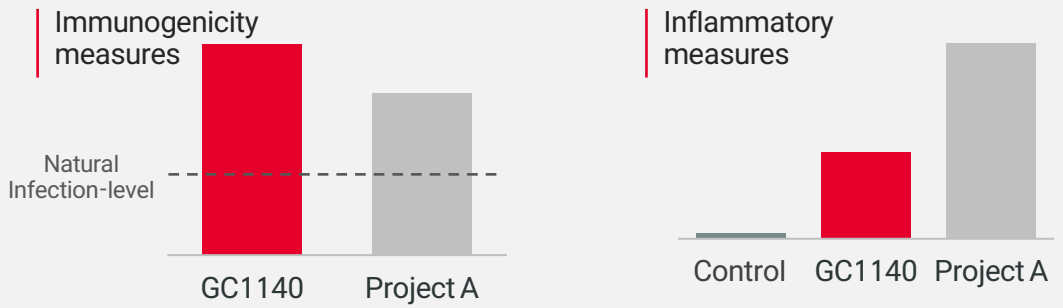
Market size: $1.5B[4]

- No currently approved vaccines
- Key competitors: mRNA-LNP vaccine(Moderna) Phase 1/2 , Ferritin nanoparticle vaccine(MSD&OPKO Health) Phase 1

• Secured novel chimeric antigens designed to induce strong immune responses •



• Confirmed superiority in efficacy and safety compared to competing projects •



1) A representative acute disease caused by EBV, transmitted via saliva in adolescents and young adults; characterized by symptoms such as fever, pain, fatigue, and lymphadenopathy (swollen lymph nodes),
2) The risk of disease onset increases 32-fold upon EBV infection, 3) Lymphoma, nasopharyngeal cancer, gastric cancer, etc.: Responsible for over 150,000 deaths,
4) Calculated and aggregated based on data from US, CA, 5EU(Germany, France, Italy, Spain, United Kingdom), JP, KR, SG, AUS, Benelux(Belgium, Netherlands, Luxembourg), Swiss, Austria

Portfolio diversification through mRNA/LNP-based COVID-19 Vaccine

Recognition of mRNA/LNP Platform technology through COVID-19 vaccine development

Achievement of COVID-19 vaccine self-sufficiency

Capable of rapid pandemic response through vaccine development

Possession of proprietary mRNA/LNP Platform

Secured core technologies based on numerous patents

GMP infrastructure and production capabilities

Capability for in-house mass production via Hwasun GMP facility

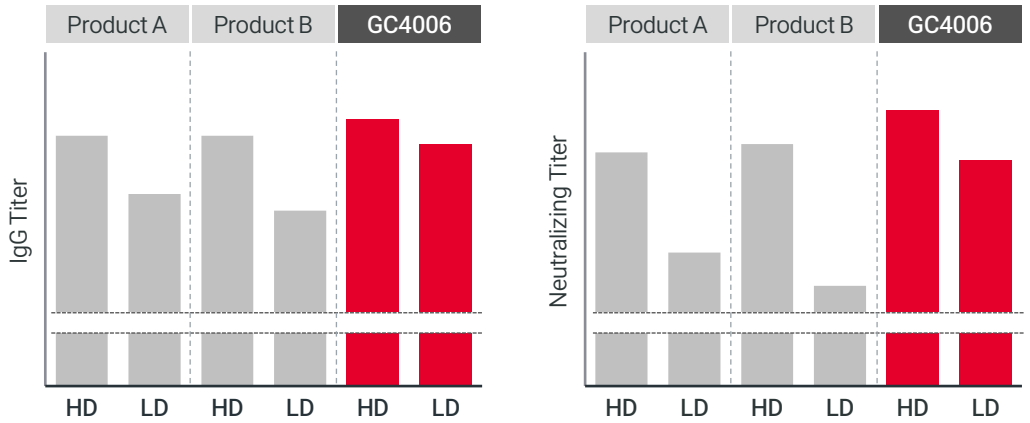
Top-tier vaccine development experience in Korea

Successful track record of multiple product approvals

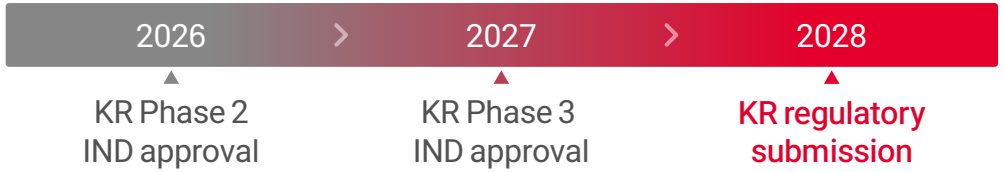
Preclinical/Phase 1

Selected for government-funded project for pandemic-ready mRNA vaccine development led by KDCA

Confirmed comparable immunogenicity to competitors at equivalent doses in In Vivo mouse models



Timeline



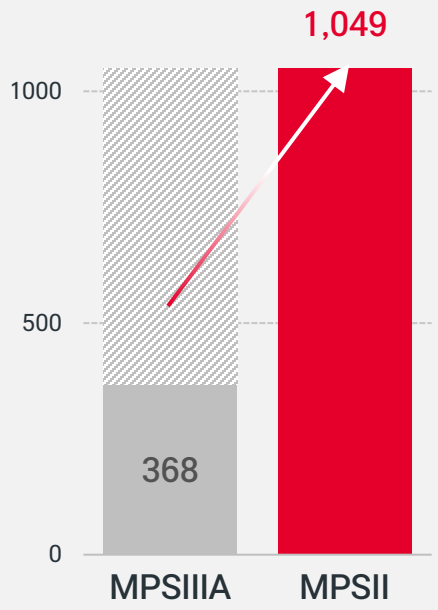
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MPSIIIA treatment: US/KR Phase1 LPI completed

MPSIIIA treatment Market growth potential

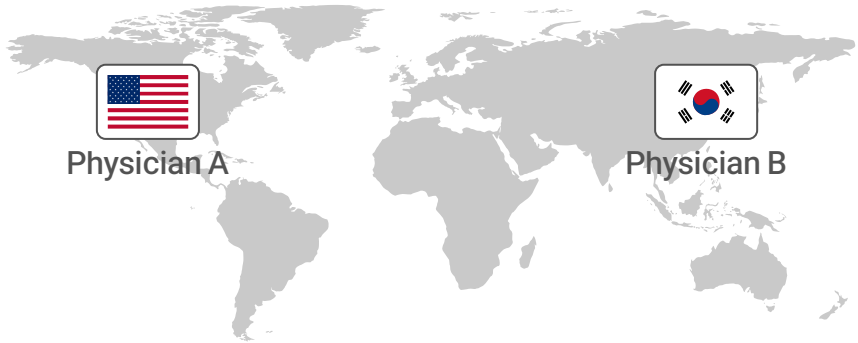
(Unit: $M)

Market size growth outlook,
Estimated based on MPS II-equivalent prevalence rates



Phase 1 | Phase 2/3

Principal investigator's perspectives



Physician A

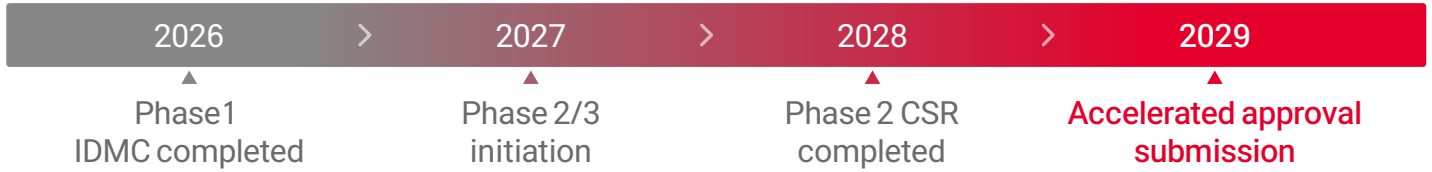
Based on caregiver observations, **overall improvement in daily functioning was noted** after the 4th dose, including reduced hyperactivity, enhanced focus during play, and better eye contact and communication

Based on caregiver observations, **overall improvement in daily functioning was noted** following the first dose; after the second dose, **a reduction in sedentary (lying down) time and an increase in rolling-over attempts were observed**

Physician B

Timeline

Country: US, KR

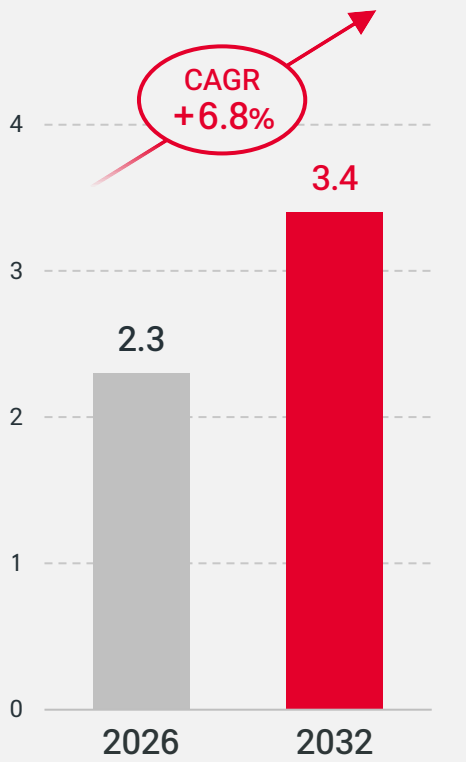


1) Market size as of 2032, Source: Evaluate pharma(2026)

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Fabry treatment: US/AR/KR Phase 1/2 Cohort1 enrollment completion

Fabry treatment Market outlook[1)]



Cohort 1 | Cohort 2 | Cohort 3

Co-development Hanmi 한미약품

Evaluation of safety and tolerability after SC administration once every 4 weeks

No serious adverse events reported

As the final stage of Cohort 1,
a safety review committee meeting
for dose escalation in Cohort 2
is scheduled for 1H 2026

Principal investigator's perspective

Night sweats and sustained vitality,
not previously observed,
were noted after SC administration
once every 4 weeks;
this suggests **potential changes in autonomic nervous system function and a more gradual systemic distribution of the drug for efficacy**

1) Source: Evaluate pharma(2026)

Building a foundation for future growth with next-generation bispecific antibody ADC

- **Improved ADC based on controlled binding affinity targeting EGFR × cMET**

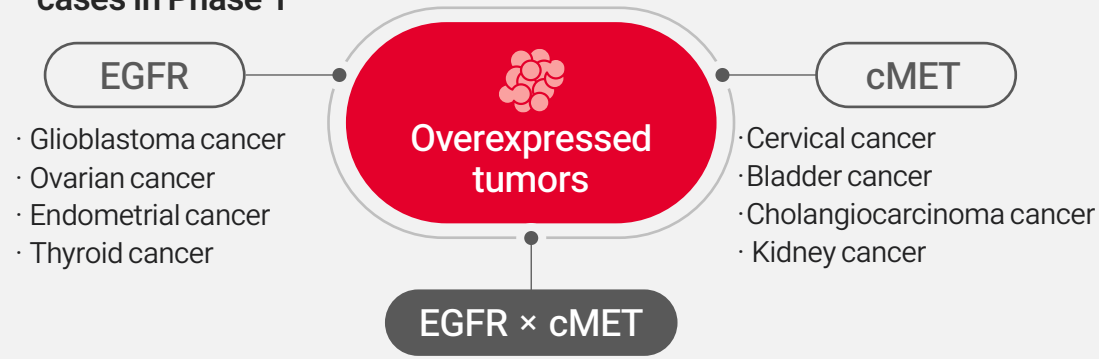
➤ **Expected broad patient applicability and suppression of cancer cell resistance and escape mechanisms**

➤ Entry into preclinical stage (Feb 2026)

Market potential

➤ EGFR × cMET–based bispecific ADC is one of the key areas gaining global attention

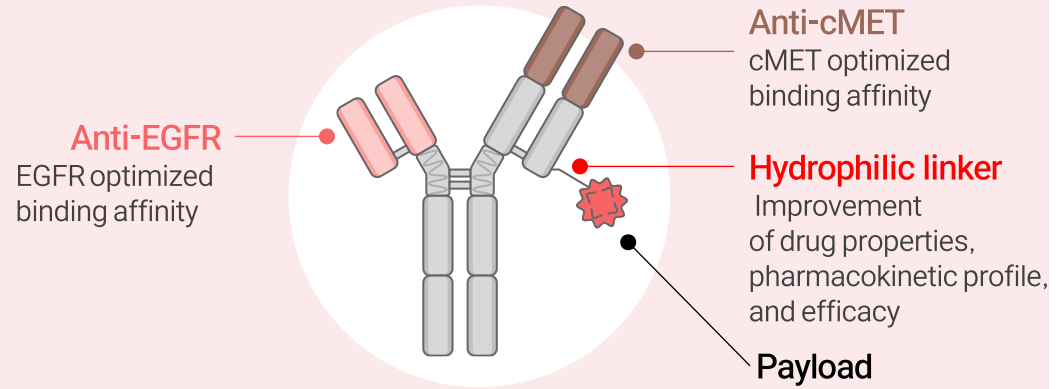
➤ **Multiple pipelines in clinical development: 1 case in Phase 1/2, 8 cases in Phase 1**

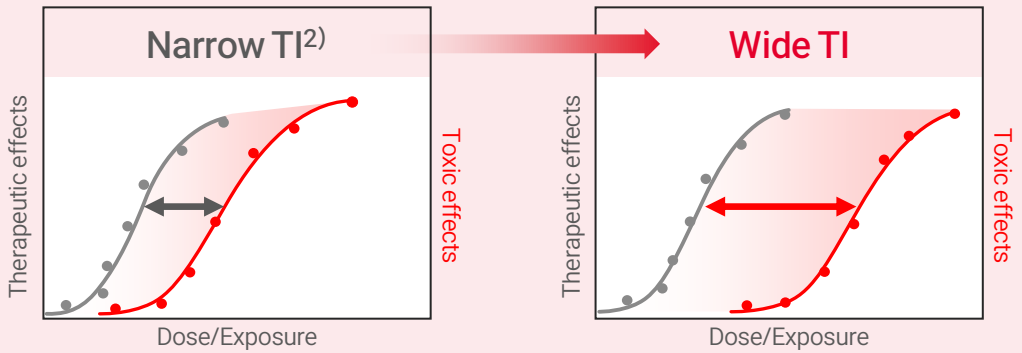


NSCLC, Colorectal, Breast, Esophageal, Pancreatic, Liver, Gastric cancer

Co-development KANAPH Therapeutics Inc.

Securing a wide therapeutic index through a hydrophilic linker





From possibility to execution and achievement :accelerating the commercialization of mRNA/LNP platform

Driving commercialization and core asset conversion of proven platforms

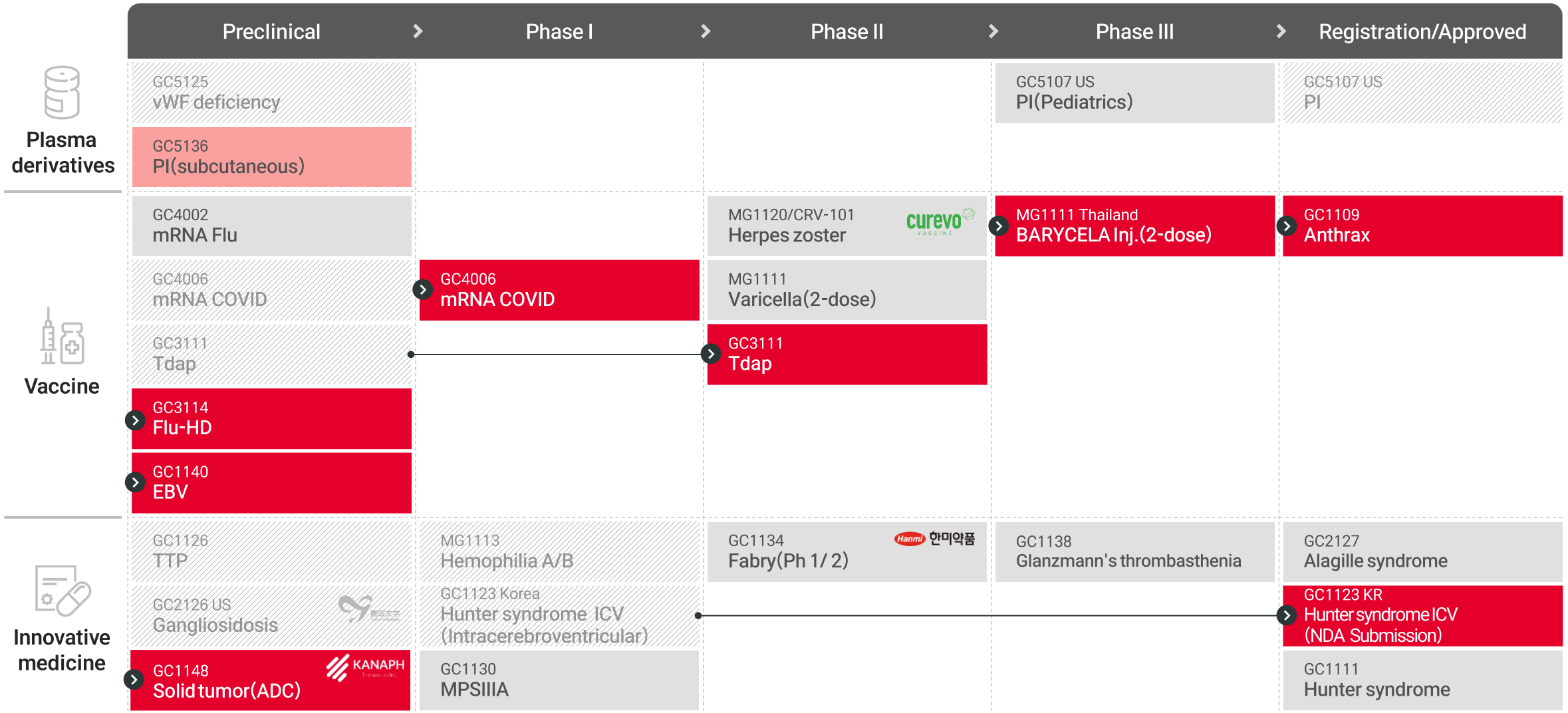
- Securing advanced mRNA-based technology
- Research on Tissue – tropic LNP
- Building proprietary GMP production system

- **Asset development**
  Applied to COVID-19 vaccine development for pandemic readiness
- **Building foundation for platform commercialization**
  Signed Material Transfer Agreements (MTA) with over 10 domestic and international partners

Delivering tangible business results beyond platform validation

Global & Domestic Presentations	Material Transfer Agreements	Development and Option Agreement
18	6	1

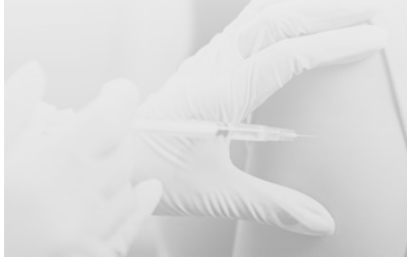
2026 R&D pipelines



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2026 R&D Key milestones

Product approval& Clinical development



Expanding global approvals and advancing clinical development

- Regulatory approval in 11 countries
- MPSIIIA treatment: Phase2/3 initiation(Global)
- Fabry treatment: Cohort initiation(Global)
- BARYCELA Inj. (2-dose): Phase 3 initiation(KR/VN)
- Flu-HD vaccine: Phase 2/3 initiation(KR)
- COVID-19 vaccine: Phase 2 initiation(KR)
- Tdap vaccine: Securing Phase 1/2 result(KR)
- Alyglo® pediatric clinical trial : Securing US Phase 3 result(US)

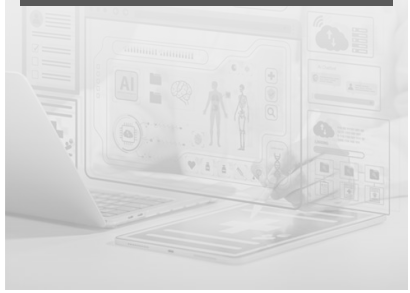
Early-stage projects



Accelerating candidate selection & preclinical development

- Chronic inflammatory lung disease
- Inflammatory bowel disease(IBD)
- Macular degeneration: Bispecific antibody
- Idiopathic pulmonary fibrosis
- Oncology bispecific ADC

Platform



mRNA/LNP platform improvement & application

- Continued investment in mRNA/LNP R&D
- AI-Driven advancement of mRNA/LNP platform
- mRNA/LNP platform applied to pipeline expansion

04

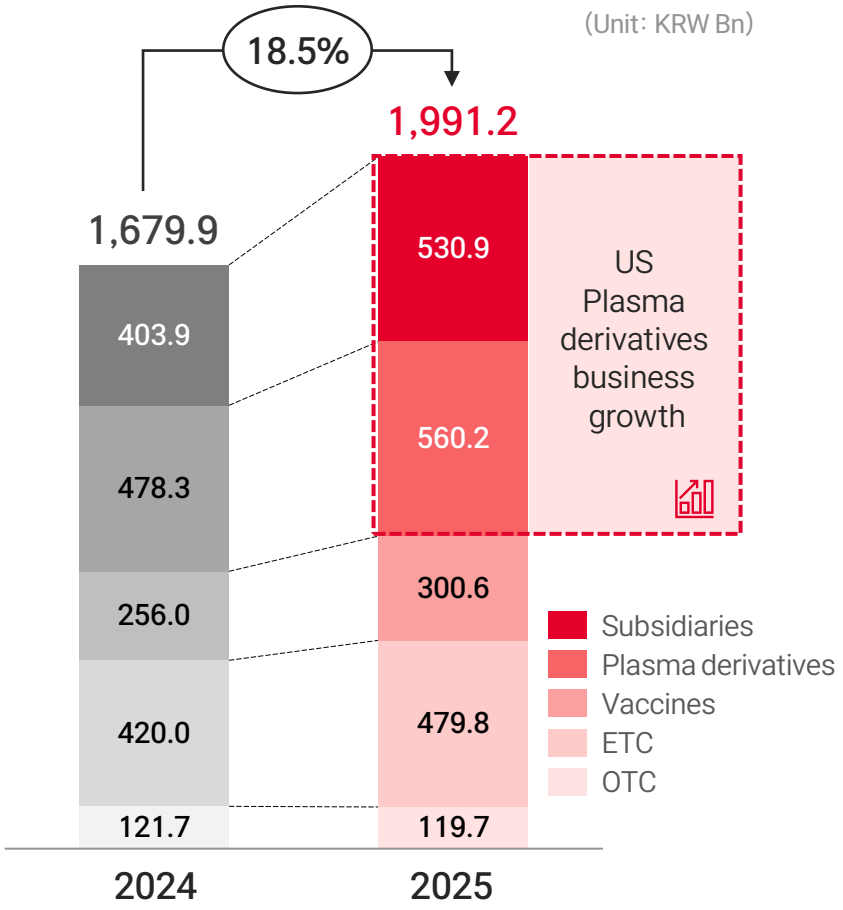
Financial Outlook

Sung-ryoul Kim, CFO

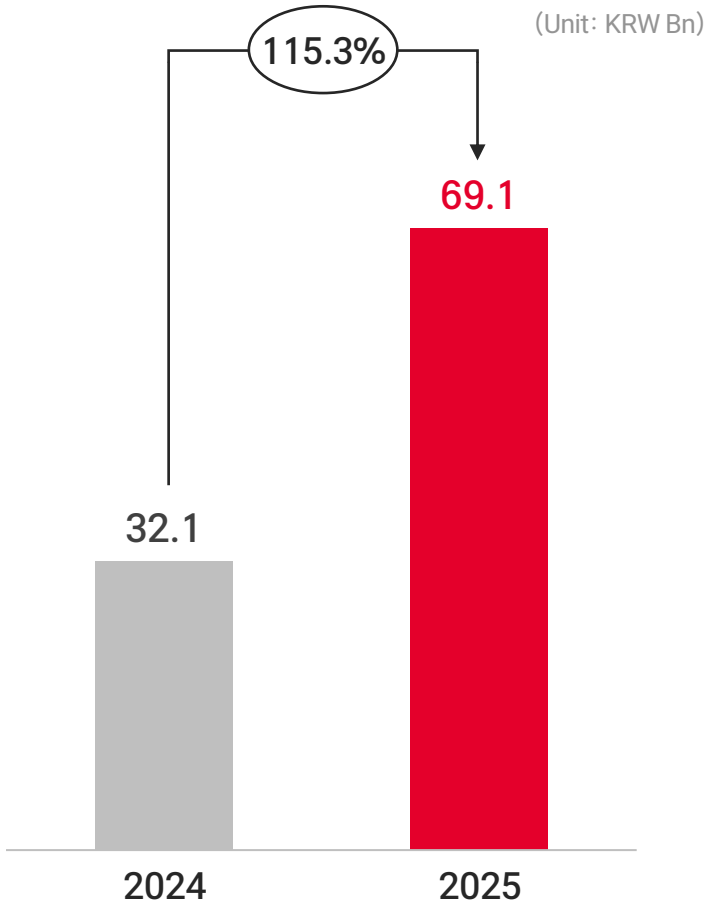
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2025 Annual financial results summary (Consolidated)

Revenue



Operating margin



- ✓ Full-scale profitability improvement driven by the robust growth of high-margin products, including Alyglo®
- ✓ Securing a foundation for long-term growth in plasma derivatives through ABO Holdings acquisition
- ✓ Consistent global growth of key products, BARYCELA Inj.& Hunterase

[Back-up] FY2025 financial statement (Consolidated)

Income statement

(Unit: KRW Bn)

	FY2025	FY2024	YoY(%)
Revenues	**1,991.3**	1,679.9	+18.5
Gross Profit	**554.1 (27.8%)**	481.9 (28.7%)	+15.0
R&D Expenses	**152.9 (7.7%)**	166.2 (9.9%)	-8.0
SG&A (incl. R&D)	**332.1 (16.8%)**	283.6 (16.9%)	+17.1
Operating Income	**69.1 (3.5%)**	32.1 (1.9%)	+115.3
Net Income	**-29.7 (N/A)**	-42.6 (N/A)	Maintaining deficit

Financial statement

(Unit: KRW Bn)

	FY2025	FY2024
Assets	**2,971.1**	2,743.9
Current Assets	**1,370.4**	1,200.9
Cash and cash equivalents	**49.4**	22.6
Non-current Assets	**1,600.7**	1,542.9
Liabilities	**1,576.8**	1,262.9
Current liabilities	**1,145.8**	749.7
Long-term liabilities	**431.0**	513.2
Short-term and Non-current borrowings	**862.2**	717.4
Equity	**1,394.3**	1,481.0
Capital stock	**58.4**	58.4
Capital Surplus	**396.2**	396.2
Retained Earnings	**796.5**	815.3

2026 expected outcomes

Over10% of revenue growth

Over 30% of operating income growth



Achieving $150M of Alyglo®

Global growth of high margin products, Hunterase & BARYCELA Inj.

Expanding domestic primary care products

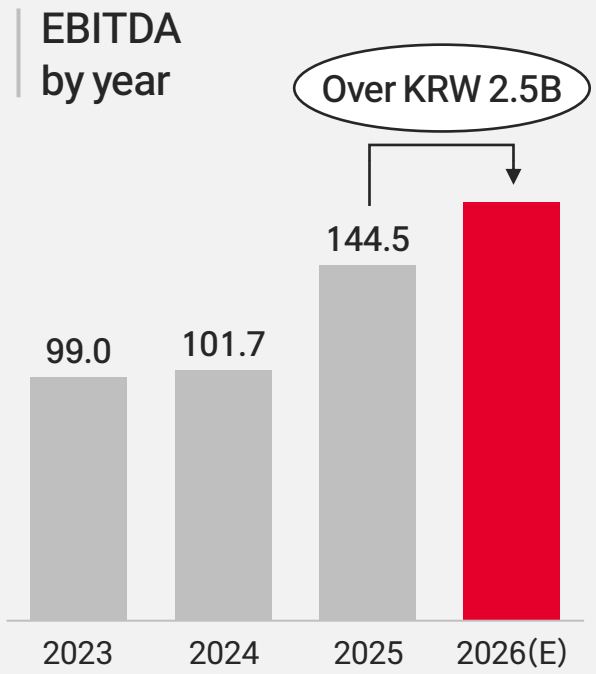
Narrowing deficit by optimizing subsidiary management

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Improving financial structure by cash flow management and capital secured

Accelerating operational cash flow improvement

(Unit: KRW Bn)



Securing capital to improve financial structure

Corporate bond issuance

Asset divestment

1

Securing capital
for new Investment through
consistent annual EBITDA growth

2

Debt reduction
by reducing inventory assets
following the stabilization
of Alyglo® business
and executing asset divestments

Glossary

ADC: Antibody Drug Conjugate

BLA: Biologics License Application

CEX: Cation Exchange
CPL: Cost Per Liter
CSR: Clinical Study Report

EBV: Epstein-Barr Virus
EBITDA:
Earnings Before Interest, Taxes, Depreciation and Amortization
EGFR x C-MET:
Epithelial Growth Factor Receptor x c-Mesenchymal–Epithelial Transition Factor

GCBP: GC Biopharma
GMP: Good Manufacturing Practice
GPO: Group Purchasing Organization
GTN: Gross To Net

HD: High Dose

ICV: Intracerebroventricular
IDMC: Independent Data Monitoring Committee
IG: Immunoglobulin
IND: Investigational New Drug Application
IRA: Inflation Reduction Act
IV: Intravenous
IVIG: Intravenous Immunoglobulin

LD: Low Dose
LPI: Last Patient In

MDD: Medicine Discovery & Development
MPS: Mucopolysaccharidosis

NDA: New Drug Application

ODD: Orphan Drug Designation

PAHO: Pan American Health Organization
PBM: Pharmacy Benefit Manager
PI: Primary Immunodeficiency
PPMO: Practice Provider Management Organization

RRC: R&D Review Committee

SC: Subcutaneous
SCIG: Subcutaneous Immunoglobulin
SP: Specialty Pharmacy

TI: Therapeutic Index

WAC: Wholesale Acquisition Cost

Thank you

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