

4Q 2023



Sensing Ahead, Caring More



1. Company Overview

2. Business Overview

- 1) Glucose Monitoring Business
- 2) POCT Business

3. Financial Overview

Appendix

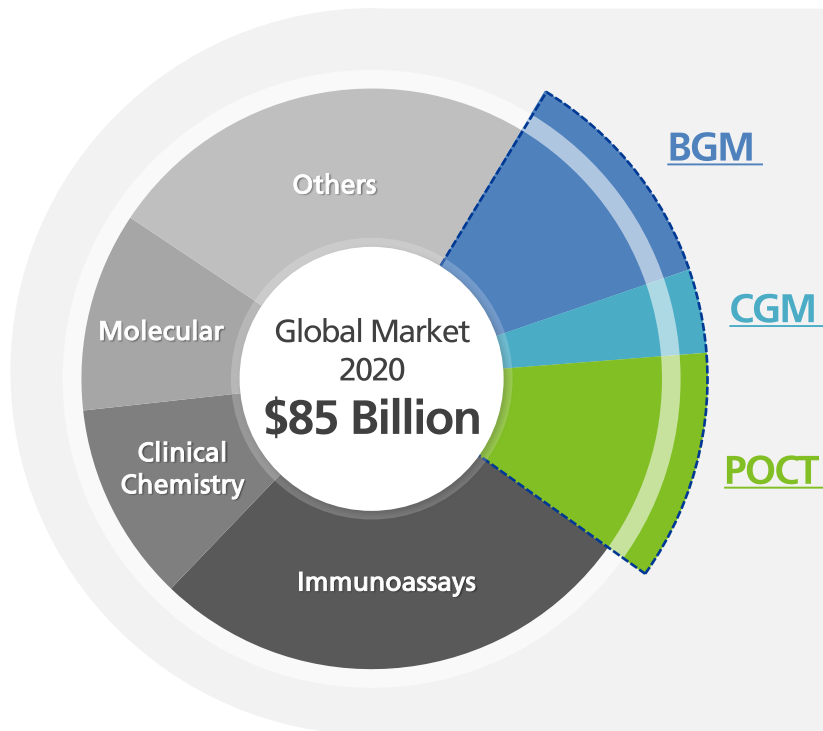
1. Market Overview: In Vitro Diagnostics

In Vitro Diagnostics (IVD)



The Largest Market in Medical Devices

IVD by Segment



i-SENS Business Segments

Glucose Monitoring

• Blood Glucose Monitoring (BGM)

• Continuous Glucose Monitoring (CGM)

POCT (Point-of-Care Testing)

i-SENS Sales Ratio

85%

Launch in 2023

15%

Source: Biotech Policy Research Center (2021)

* Based on 2023 revenue

2. i-SENS Product Portfolio

Glucose Monitoring

BGM (Blood Glucose Monitoring)



Test Strip



Meter

CGM (Continuous Glucose Monitoring)



Launched in September 2023

POCT (Point-of-Care Testing)

POCT Devices



BGM for Hospital Use



HbA1c Analyzer



Blood Electrolyte Analyzer



Blood Gas Analyzer



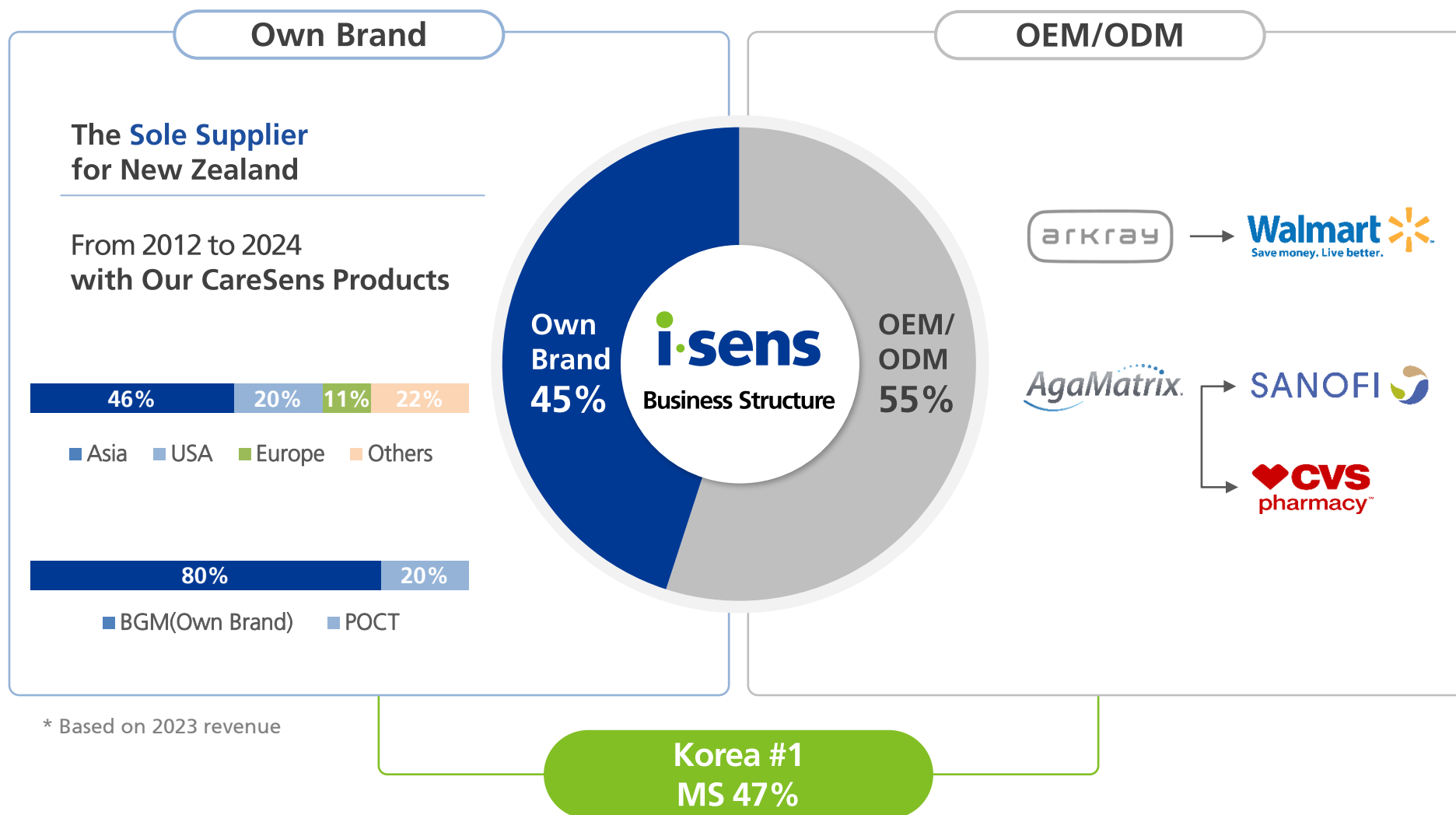
PT/INR* Analyzer



Immunoassay Analyzer

* PT/INR(Prothrombin Time and International Normalized Ratio)

3. Business Structure and Global Partners



Sensing Ahead, Caring More



- ## 2. Business Overview

1) Glucose Monitoring Business

- ## 2) POCT Business

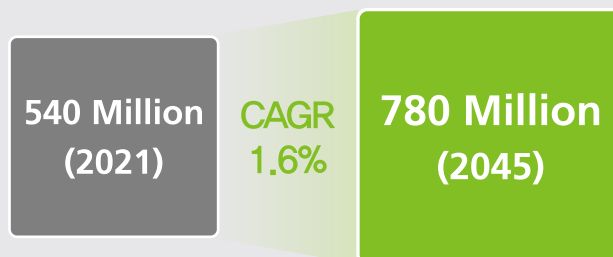
- ### 3. Financial Overview

Appendix

1. Diabetes Population

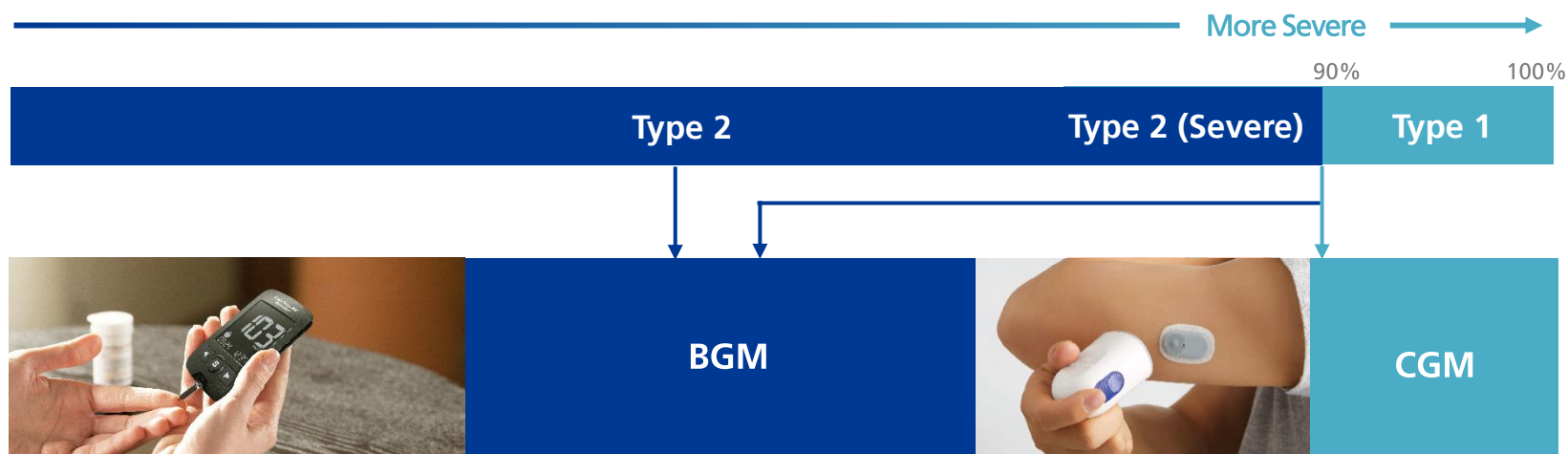
Increasing Diabetes Population

Diabetes Patients Forecast



Type
of
Patients

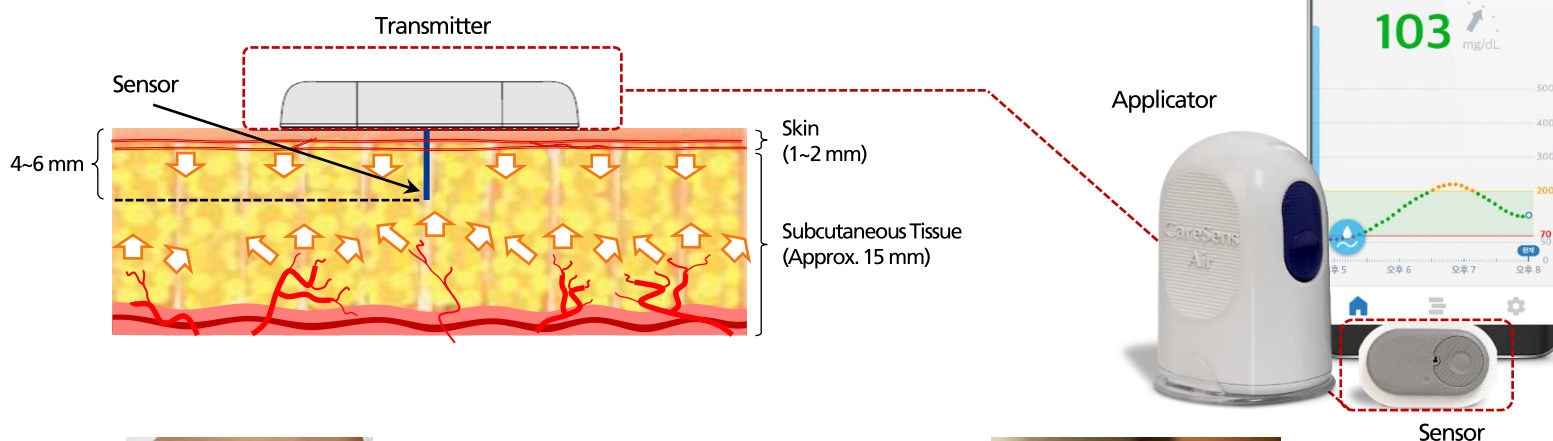
Type
of
Devices



Source: IDF(International Diabetes Federation), i-SENS Analysis

2. Continuous Glucose Monitoring : New Opportunities

Glucose Level Continuously Measured on a Real-time Basis



Type



CGM



BGM

Type		
How it works	Measures glucose level of interstitial fluid through sensor inserted beneath the skin	Measures glucose level in the blood of fingertip
Target users	Type 1 and severe type 2 diabetes patients	All types of diabetes patients (Type 1&2, gestational diabetes patients)
Where to use	Upper arm	Fingertip
Measurement sample	Interstitial fluid (No blood drawn)	Capillary blood
Replacement period	1-2 weeks per sensor	Disposable single-use strip
Strengths	Diabetes management easier, alarm function for hypoglycemia/hyperglycemia, less pain than BGM, simple data sharing	High accuracy and reasonable price
Challenges	High price, skin irritation, lower accuracy compared to BGM	Frequent measurements, penetration pain, hypoglycemia shocks

2. CGM Video

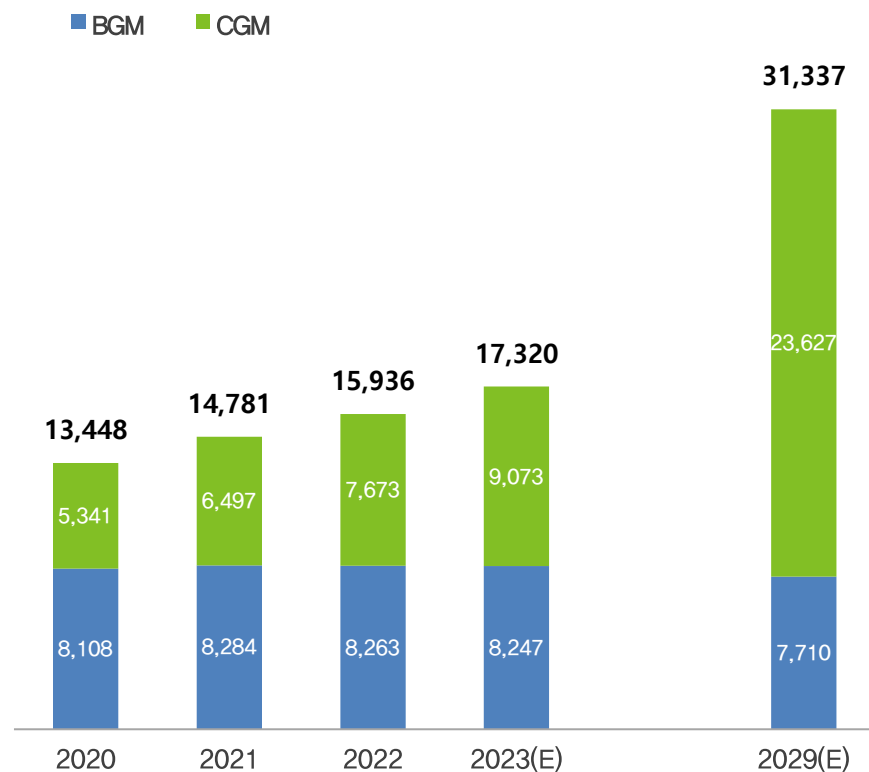


3. Global BGM & CGM Market Size

Growth of i-SENS BGM Market Share

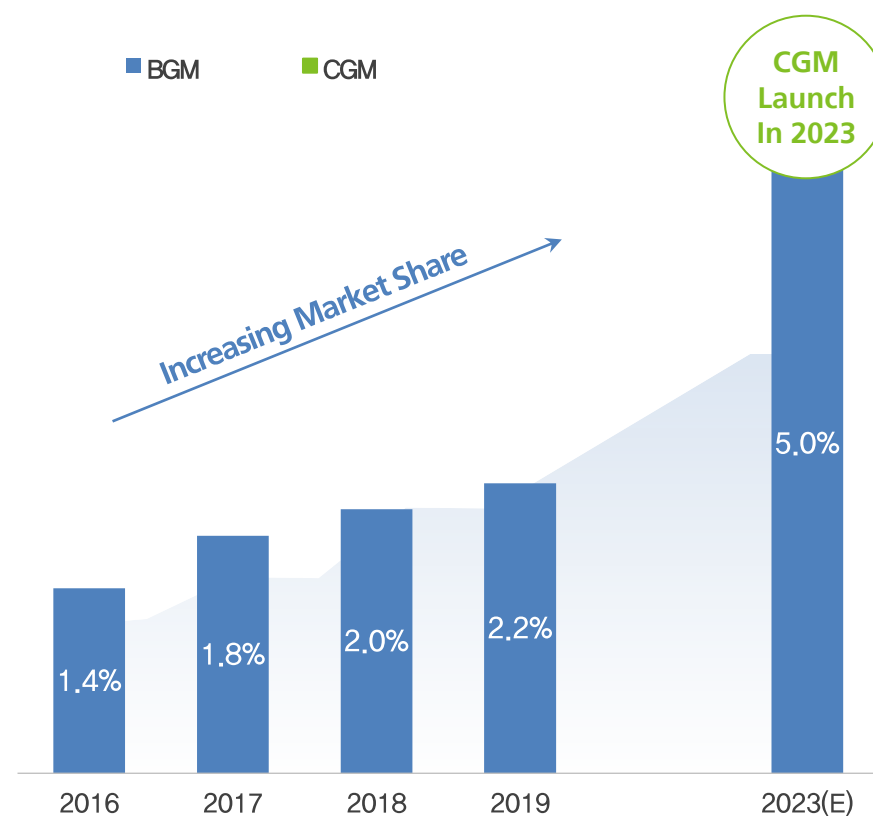
Global Market Size

(Unit: \$ million)



i-SENS Market Share

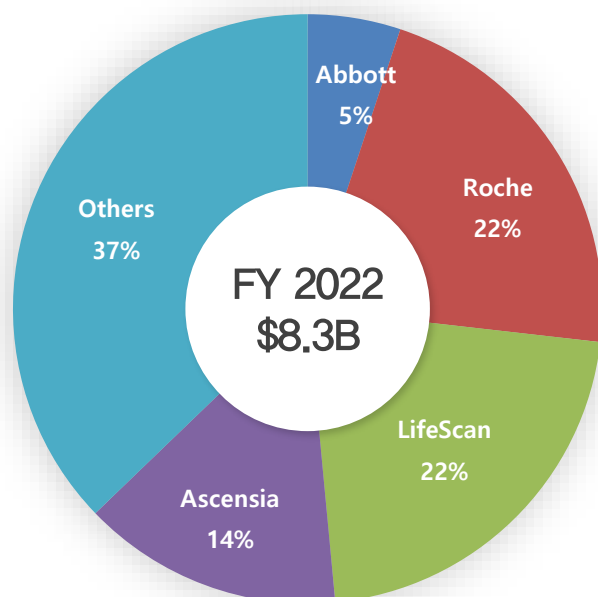
(Unit: \$ million, %)



Source: Fortune Business Insights Quantitative Data Blood Glucose Monitoring Systems – Global Market Analysis, Insights, and Forecast, 2028–2029, i-SENS analysis (Based on manufacturer sales)

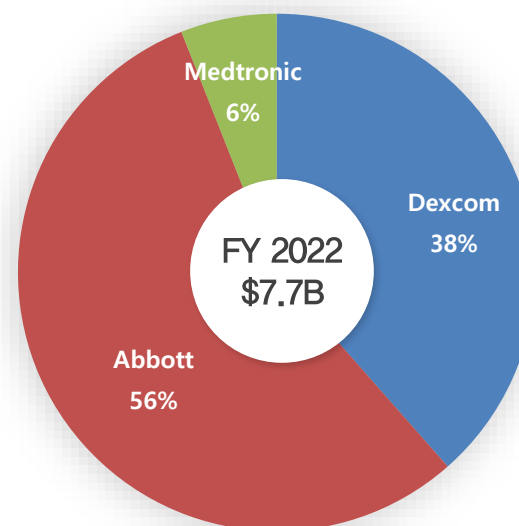
4. Global Market Share

1) BGM Market



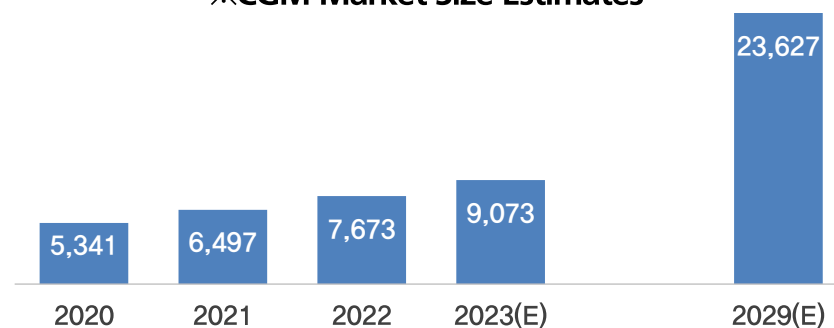
Source: Fortune Business Insights Quantitative Data Blood Glucose Monitoring Systems – Global Market Analysis, Insights, and Forecast, 2028–2029

2) CGM Market



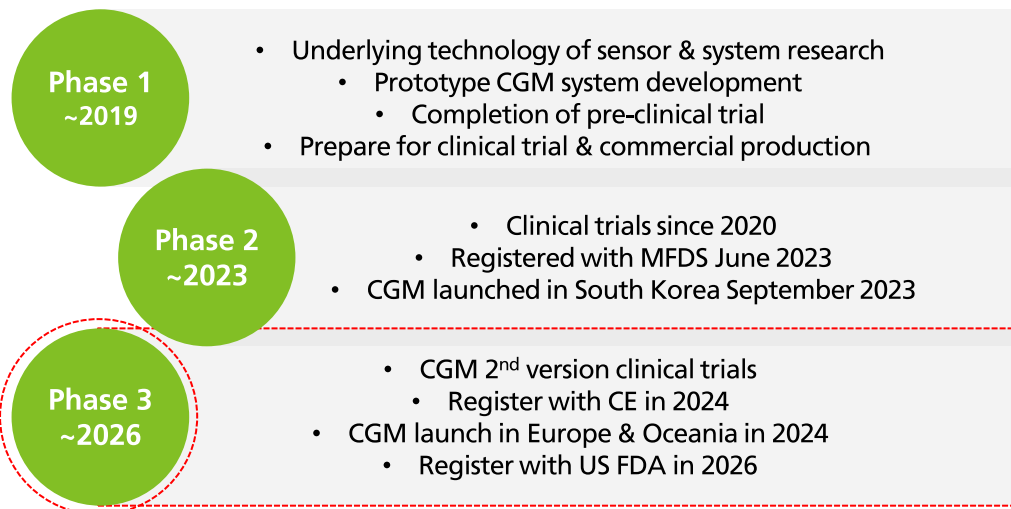
※CGM Market Size Estimates

(Unit: \$ million)



Source: Fortune Business Insights Quantitative Data Blood Glucose Monitoring Systems – Global Market Analysis, Insights, and Forecast, 2028–2029

5. i-SENS CGM

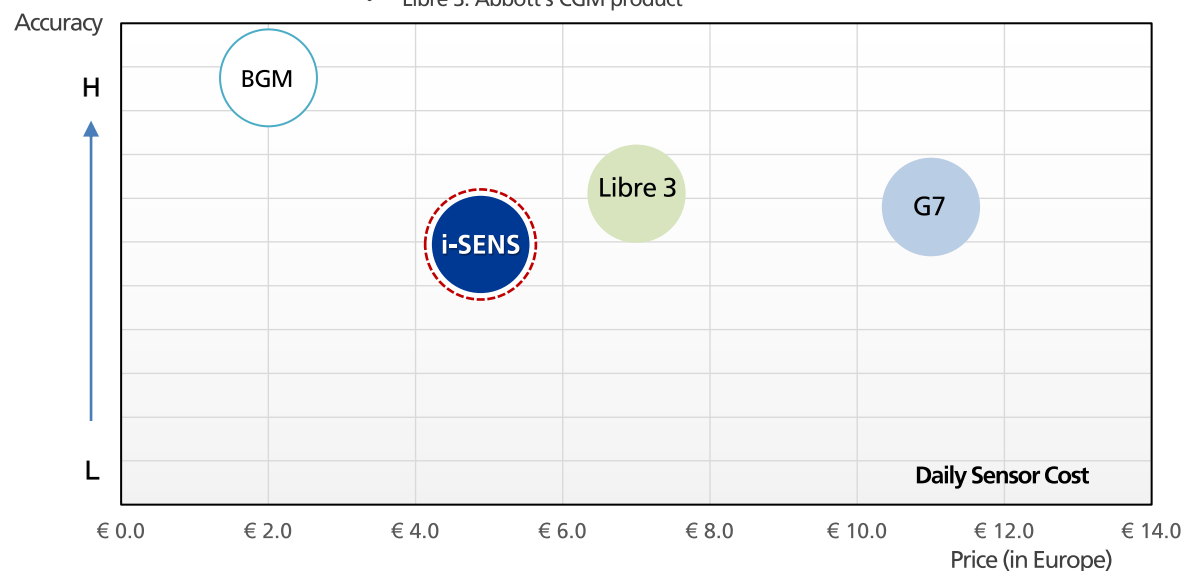


Year	Countries to Launch
~2023	Korea
~2024	Europe
~2024	Oceania / South America, etc
~2026	United States / China / Japan, etc.

i-SENS Target Specifications



- G7: Dexcom's CGM product
- Libre 3: Abbott's CGM product

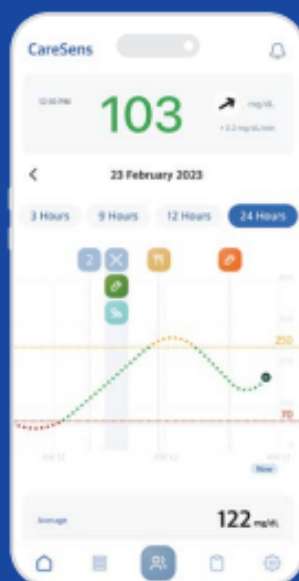


Easy Glucose Management and Data Sharing

- Displays your real-time glucose trends and life events at once
- Provides glucose statistics for better understanding
- Lets you share your glucose information with your care providers via Sens365 app



CareSens Air APP



Sens365 APP

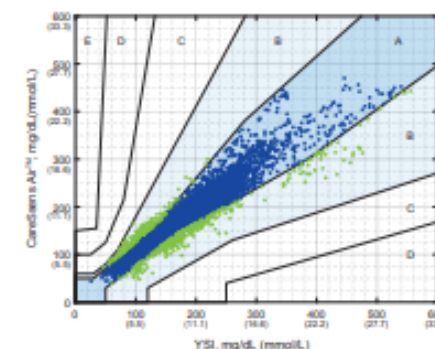
The CareSens Air app and Sens365 app are only compatible with certain smart device operating systems. Please check the website for more information about device compatibility before using the app.

System Accuracy

CGM Glucose Level (mg/dL)	n	MAD (mg/dL) or MARD (%)
All	7418	9.8 %
< 54	12	12.3 mg/dL
54-69	113	13.2 mg/dL
70-180	4694	10.0 %
181-250	1731	8.4 %
>250	868	10.1 %

*MAD (mg/dL) is displayed for < 69 mg/dL, and MARD (%) is displayed for ≥ 70 mg/dL glucose levels.

*The data is Per Protocol Set (PPS).



*100% of readings are in Consensus Error Grid Zones A+B

*The data is Per Protocol Set (PPS).

Technical Specification

Sensor Life	15 days
Warm-up	2 hours
Measurement Range	40-500 mg/dL
Data Transfer Interval	Every 5 minutes
Sensor Data Storage	12 hours of glucose data
Data Transmission Distance	6 meter
Shelf Life	12 months
Calibration	Day 1: Every 12-hour interval Day 2: Every 24-hour interval
Operating Conditions	Temperatures: 10-42 °C Humidity: 10-95 RH%
IP Rating	IP48



Development of Next-Generation CGM Products

Planning to release version 1.5 (eligible for approval change) and then launch of version 2.0

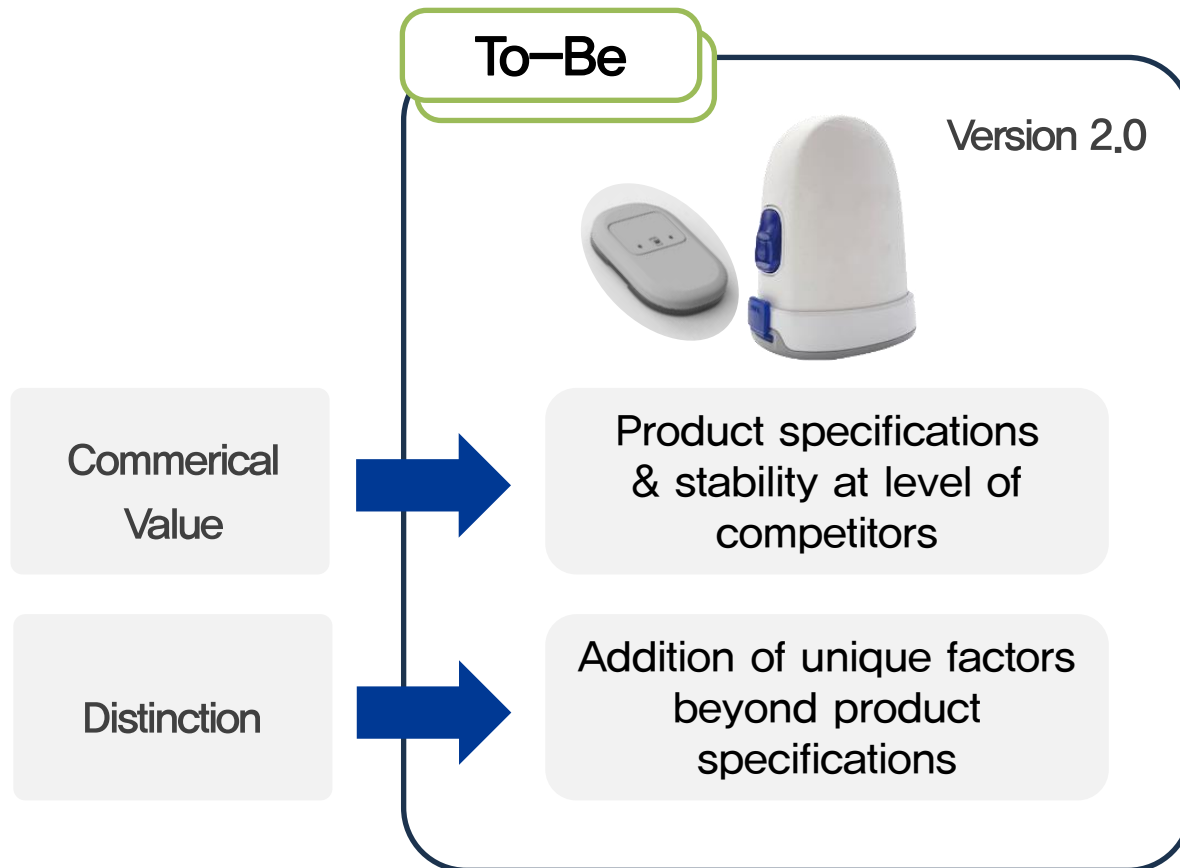
Next-generation CareSens Air products (version 1.5 & version 2.0)

Product	CareSens Air 1.5		CareSens Air 2	
Target	Adults	Children	Adults	Children
Warmup Time	2 Hours		20 Minutes	
Sensor Life	15 Days		16 Days	
Calibration	Factory-calibrated		Factory-calibrated	
Data Transfer Interval	5 Minutes		1 Minute	
Data History Interval	5 Minutes		5 Minutes	

Development of Next-Generation CGM Products: CareSens Air 2

Plans for CGM version 2.0

- 1) Upgraded sensor function 2) Improved user convenience 3) Utilization of data 4) Private label by Design

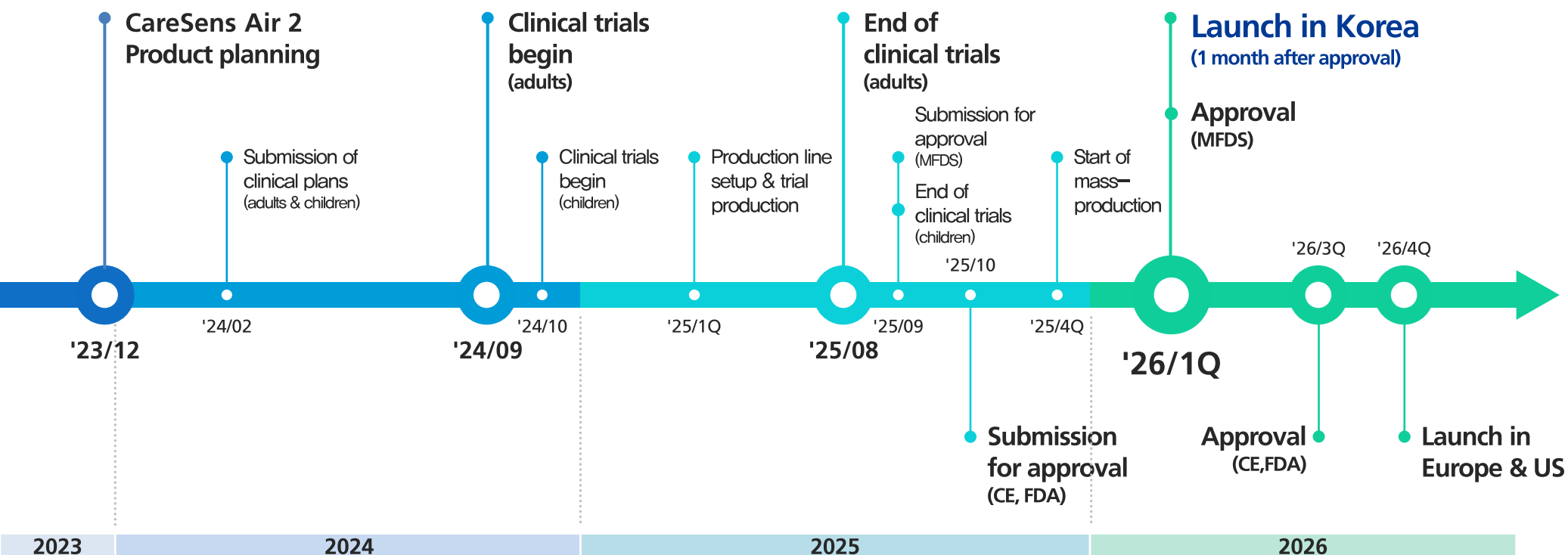


- Size: 13.6x15.8x2.9 mm (32% smaller than ver.1)
- Weight: 1.3 g
- Data transfer interval: 1분
- Warmup time: 20분
- Sensor life: 16일
- Materials: Environmentally friendly

Development of Next-Generation CGM Products: Product Launch Schedule

CGM version 2.0 release in 1Q26 in Korea & 4Q26 in Europe and US

- Product planning → R&D → clinical trials → approval (Korea, Europe CE) → Korea launch → Europe, US, & global launch
- Parallel processing of clinical trials (adults & children) and approvals to minimize intervals between global launches



7. Acquisition of AgaMatrix Inc.

M&A to drive synergy for global BGM and CGM business

1

Acquired AgaMatrix Inc., the BGM Subsidiary of AgaMatrix Holdings

[AgaMatrix Structure]

AgaMatrix Holdings, LLC

100%

100%

AgaMatrix Inc.

[BGM Subsidiary]

WaveForm
Technologies, Inc.

[CGM Subsidiary]

Acquired 100%,
Debt-free (\$27M)

Global BGM Technology Leader

- 2022 Revenue: USD 44 million
- 2022 Operating Profit: USD 4 million

Secure US & Europe sales network of AgaMatrix

Preparation for CGM market entry into the US

Sales channels of AgaMatrix Inc.

- US: CVS Pharmacy
- Europe: Sanofi
- UK: Alliance Healthcare

8. Artificial Pancreas System (APS)

Entering APS Market through CGM Technology and Equity Investment of Insulin Patch

2

Partnership with Insulin Patch Company, CareMedi

APS:

Artificial Pancreas System

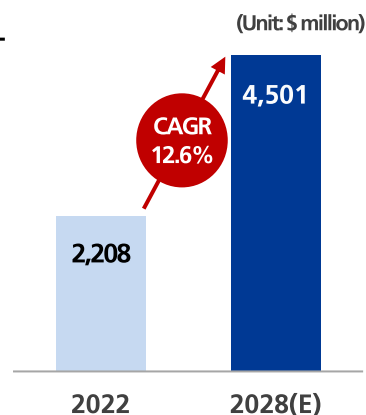
Automatically monitors blood glucose level, calculates the amount of insulin needed and when, and delivers insulin into the body

Components of APS

Automatic glucose monitor +
automatic insulin delivery system +
algorithm



Outlook of global APS market



Source : Research And Market

CareMedi
케어메디

Insulin Patch Company

Shareholders

Founder 46%

i-SENS 20%

Institutional 34%

i-SENS collaboration with CareMedi

Manufacture, Marketing, & Sales

- CareLevo production by i-SENS
- i-SENS sales network to be used for marketing and sales

CareLevo

- First 3 mL, 4-day patch pump
- Slimmest (10 mm) and lightest (18 g)
- Electrophoresis tech with strong IPs

Registration / Launch Schedule

Registration / Launch

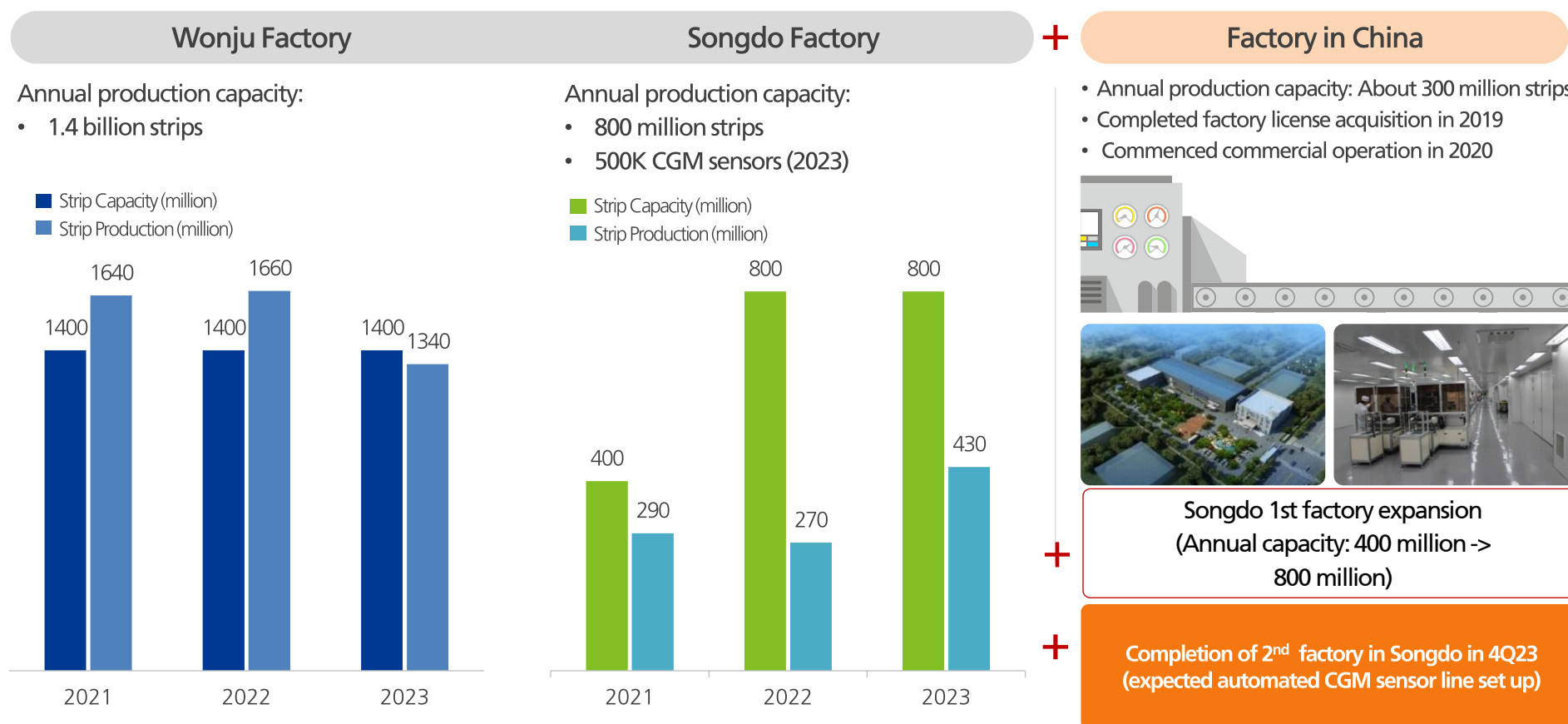
Korea Launch : End of 2024 (expected)
US FDA Registration : 2024 (expected)

Clinical trials for marketing

Europe CE Mark : 2026 (expected)

9. BGM Strip & CGM Sensor Production Capacity

Highly Efficient Manufacturing Facilities with Annual Capacity of **2.5 billion BGM Strips** and **500,000 CGM Sensors** (Single-shift basis)



※ Gross Production Capacity : Average daily production \times No. of working days \times No. of operating months ※ Based on one shift (8 working hours/day)

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1. i-SENS POCT Strategies

Hospital Market Expansion and Professionals' Trust

POCT (Point-of-Care Testing)

- POCT means tests performed at the time and place of patient care, providing faster results than central lab



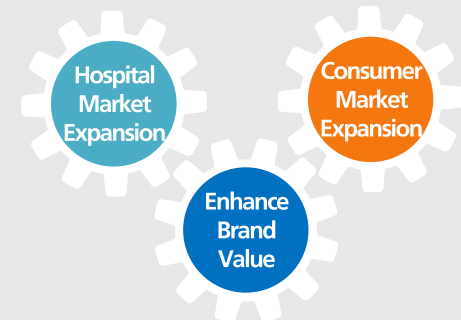
POCT



Central Laboratory

i-SENS POCT Strategies

- Enhance brand value through offering our reliable products to professionals



i-SENS POCT Highlights

- Our devices utilize consumables (such as sensor, cartridge, reagents, etc) -> Continuous profit



2. POCT: Blood Electrolyte / Gas Analyzer

The market demand is changing from medium/large devices to small devices

Blood Gas Analyzer Market

- Global market size : \$1.4 billion*
(2nd largest market in POCT)
- Intended use : To test any imbalance in blood gases such as pO_2 , pCO_2 and pH
- The imbalance is shown as Kidney disease, heart disease, respiratory disorder, shock, and etc.
- Usage: Hospitals, intensive care units, emergency rooms, and operating rooms

Blood Electrolyte Analyzer Market

- Intended use : To test the level of body hydration, muscle & nerve action, oxygen supply, and etc.
- Usage: General clinic, hospital, and etc.

Blood Electrolyte Analyzer



- Launched in February 2009
- #1 in Korea (Installed base)
- Measured components: Hct, Na, K, Cl (Existing product)
- + Ca, Mg (In development)

Blood Gas Analyzer



- Launched in 2020
- Measured components: pH, pCO_2 , pO_2 , Hct, Na, K, Cl, iCa, Glucose, Lactate

* Source: TriMark Publications Point of Care Diagnostic Testing World Markets (2013)

3. POCT: High-value Diagnostic Devices for Professionals

POCT Portfolio Diversification & Driving Growth in Hospital BGM

Diabetes Care for Hospital Use

HbA1c Analyzer



ACR Cartridge



- HbA1c test: Measurement of glycated hemoglobin level to diagnose diabetes
- Single test detects the average blood glucose level during past three months
- All-in-one cartridge, fast and accurate results
- Global HbA1c market size: \$474M*

BGM For Hospital Use



- Easy hospital data management: Real-time transmission through Wi-Fi and USB, software auto-update, etc.



Coagulation Analyzer

PT/INR Analyzer



- Product of CoaguSense, an i-SENS subsidiary in the US
- Prothrombin Time tests (PT tests) are widely used to monitor the therapeutic range of a long-term anti-coagulant such as warfarin

• CoaguSense Highlights

PT 2 system have received 510(k) clearance from the U.S.FDA in 19Q1

* Source: Global POC Glycated Hemoglobin Analyzer Market Research Report (2018)

4. POCT: Immunoassay Analyzer

Smart Integration: Does Not Require any Pretreatment of the Whole Blood

Background

- Immunochemical sensor measures antigen-antibody reaction for proteins
- A platform which measures the important cardiac markers in emergency care
- Target market: Large- and medium-sized hospitals & clinics
- Competitors: Radiometer, Mitsubishi and Siemens

Features

- Internal centrifuge process eliminates hematocrit bias → As accurate as laboratory test
- Random access up to four individual tests → Suitable for emergency care
- Compact size compared to other products
- Easy to expand market with infectious diseases



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1. Full-Year Performances

FY 2023 Earnings Results

(unit: Billion KRW, %)

	FY 2023	FY 2022	YoY
Revenue	265 (USD204M)	265 (USD204M)	+0.1%
Operating Profit(OP)	11 (USD8M)	20 (USD15M)	-43%
Operating Margin	4.1%	7.5%	
Net Profit	3.4 (USD3M)	16 (USD12M)	-79%

Exchange Rate Assumption: 1 USD = 1,300 KRW

FY 2024 Guidance

(unit: Billion KRW, %)

	FY 2024(E)	FY 2023	YoY
Revenue	310 (USD239M)	265 (USD204M)	+17%
Operating Profit(OP)	16 (USD12M)	11 (USD8M)	+47%
OPM	5.2%	4.1%	

Exchange Rate Assumption: 1 USD = 1,300 KRW

FY 2023 Financial Highlights

- Revenue

- BGM sales up +3% YoY, POCT sales up +13% YoY
- High growth rate in Africa & Middle East and South America

- Operating Profit (OP)

- Decrease in OP due to increased fixed costs at Songdo Factory 2, unrealized gains and losses on inventory assets of AgaMatrix, acquisition costs, CGM R&D costs and clinical trials, etc.

FY 2024 Financial Highlights

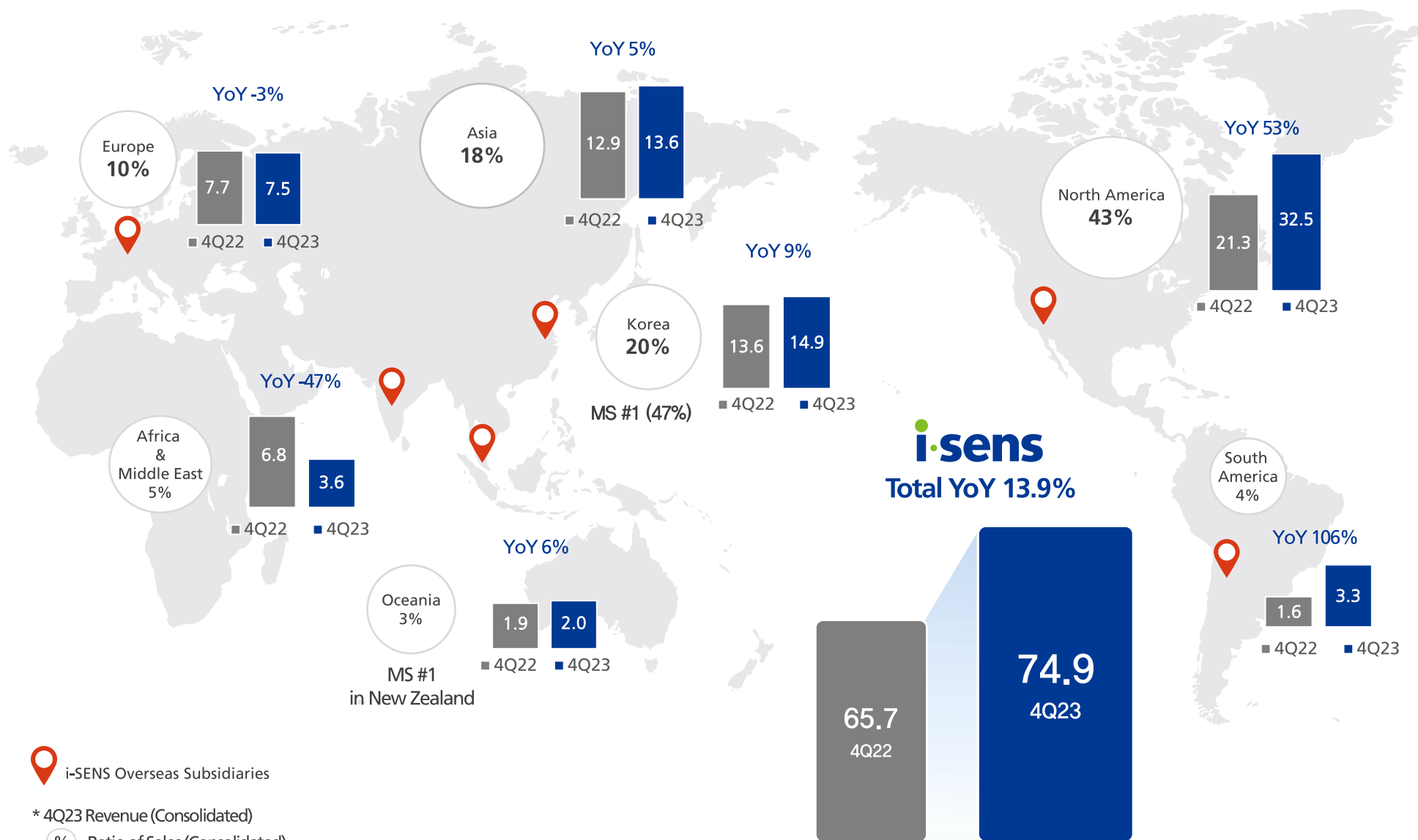
- Revenue

- Expecting increase in sales from BGM/CGM +7% YoY and POCT +34% YoY

- Operating Profit (OP)

- Expected profit margin is slightly conservative due to: increased CGM clinical trials expenses, increased cost of goods for BGM meters, depreciation of Songdo Factory 2, R&D expenses for new CoaguSense product, AgaMatrix sales & marketing expenses, etc.

2. i-SENS Sales by Region (4Q23)



i-SENS Overseas Subsidiaries

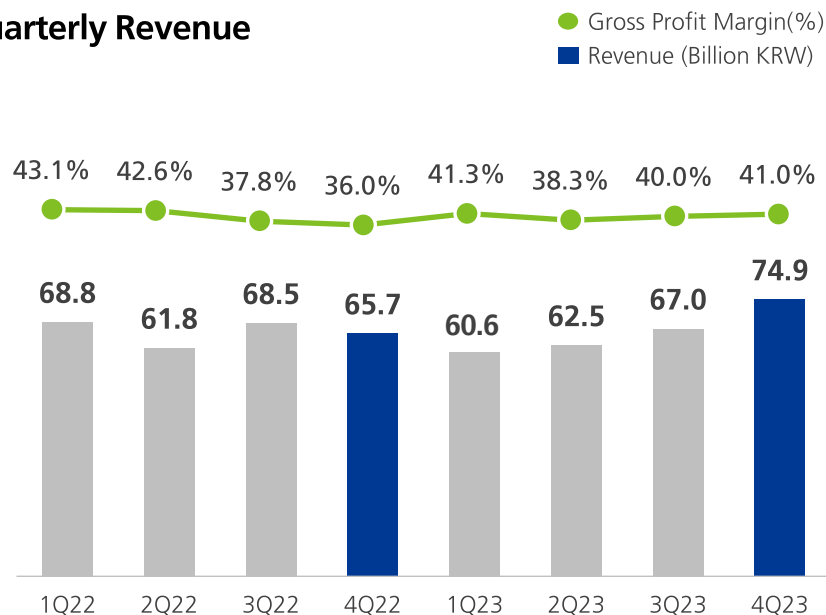
* 4Q23 Revenue (Consolidated)

Ratio of Sales (Consolidated)

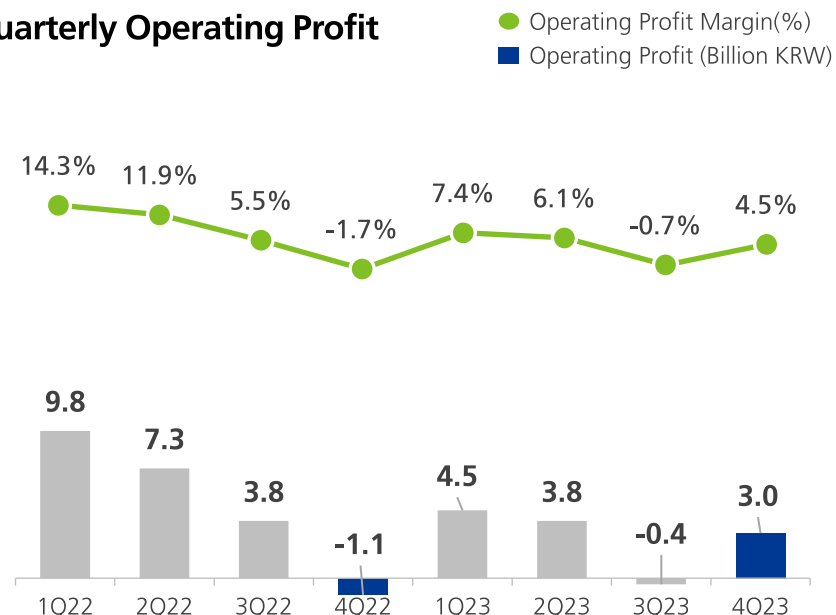
(Unit: Billion KRW)

3. Quarterly Earnings

Quarterly Revenue



Quarterly Operating Profit



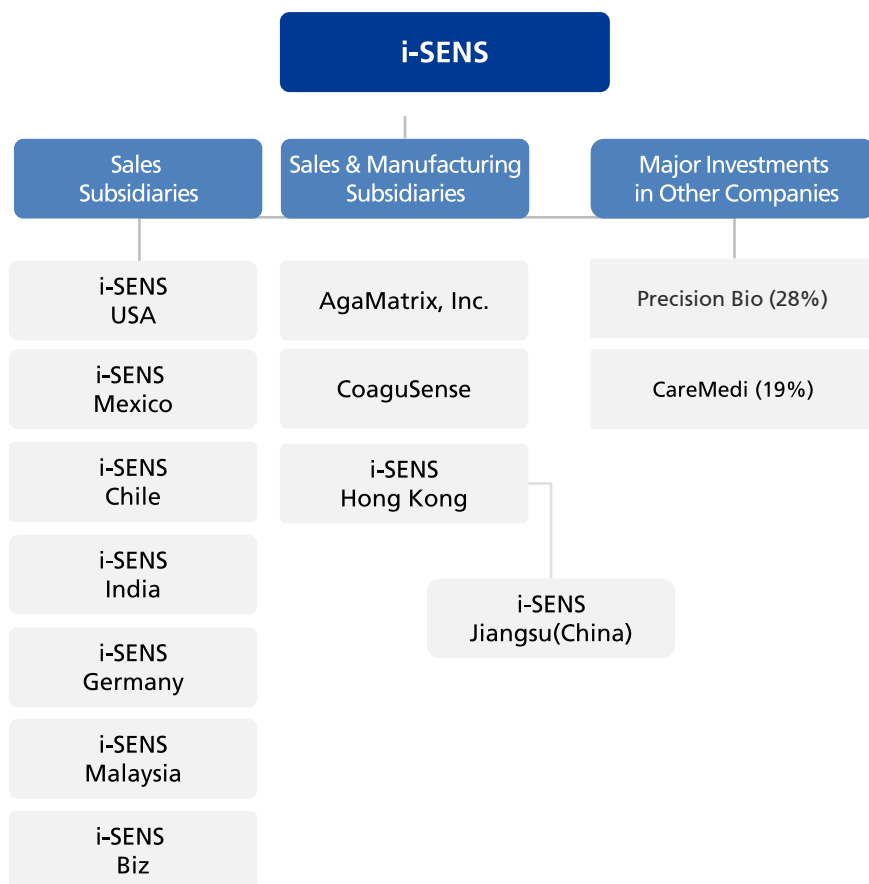
4Q 2023 Earnings Results

- Revenue increased by +14% YoY in 4Q23
- Operating profit in 4Q23 was KRW 3.0 billion
- Net loss in 4Q23 was KRW -2.6 billion

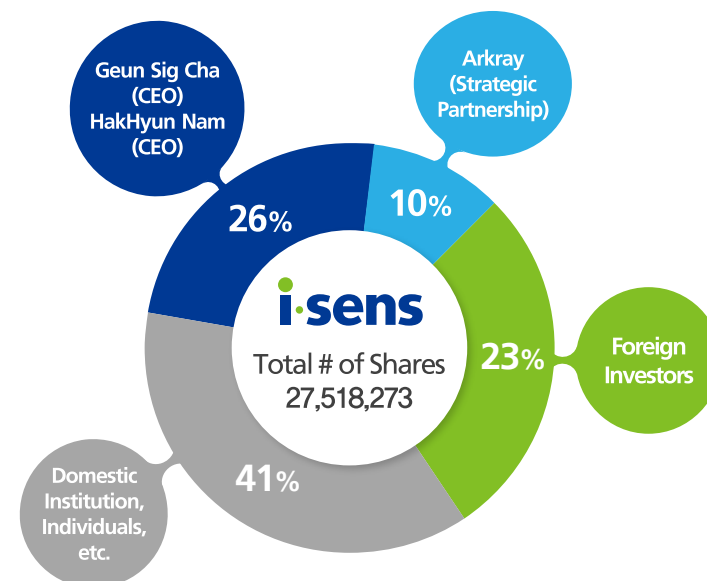
4Q 2023 Earnings Review

- BGM sales recovered in Q4 (Arkray Walmart orders normalized in Q4 after 3 quarters of inventory issues)
- 2023 CGM revenue was KRW 900 million
- Decrease in OP due to unrealized profit of KRW 3.5 billion from AgaMatrix inventory

Appendix 1. Company Profile



Company Name	i-SENS, Inc. [KOSDAQ 099190]
CEO	Dr. Geun Sig Cha, Dr. Hakhyun Nam
Main Business	Electrochemical Diagnostic Biosensors
Founded	May 4 th , 2000
IPO	January 30 th , 2013
Equity Capital	KRW 13,759 Million
# of Employees	866
Seocho Office (HQ)	43, Banpo-daero 28-gil, Seocho-gu, Seoul, Korea
Official Website	www.i-sens.com



(As of December 31st, 2023)

Appendix 2. Manufacturing supported by strong R&D

Investing in Biosensor R&D

Co-founders Profile



Geun Sig Cha (Chairman, CEO)

- BS, MS Korea University, Dept. of Chemistry
- PhD, University of Michigan
- '91~'15 Professor at Kwangwoon University, Dept. of Chemistry
- Present: Emeritus Professor at Kwangwoon Univ.
- '00~Present: i-SENS, Inc., CEO, Chairman
- '11 Ministerial Citation Award for Korea's Startup Exhibition (Ministry of Knowledge Economy)
- '14 Ministerial Citation of Merit Award for Medical Device Industry (Ministry of Health and Welfare)
- '16 Presidential Citation of Merit for Electronics& IT Day (Ministry of Trade, Industry and Energy)

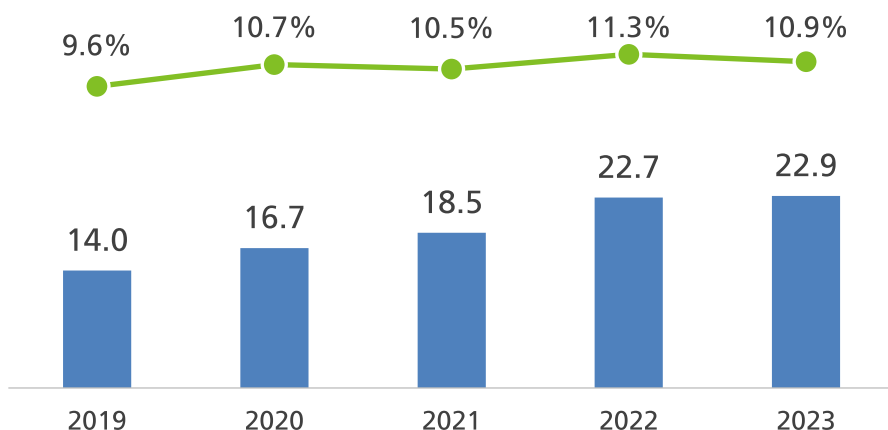


Hakhyun Nam (President, CEO)

- BS, Seoul National University, Dept. of Chemistry
- PhD Michigan State University
- '92 ~'15 Professor at Kwangwoon University, Dept. of Chemistry
- Present: Emeritus Professor at Kwangwoon University.
- '00 ~ Present : i-SENS, Inc., CEO, President
- '08 Citation of the excellent researcher for R&D in health and medical science technology (Minister of Health and Welfare)
- '11 Citation of Merit Award for Industrial-education Cooperation
- '11 Citation of Merit Award for Industrial Technology
- '19 KITA's top export award (Ministry of Trade, Industry and Energy)
- '19 Citation of Science, Information and Communication Day (Prime Minister)

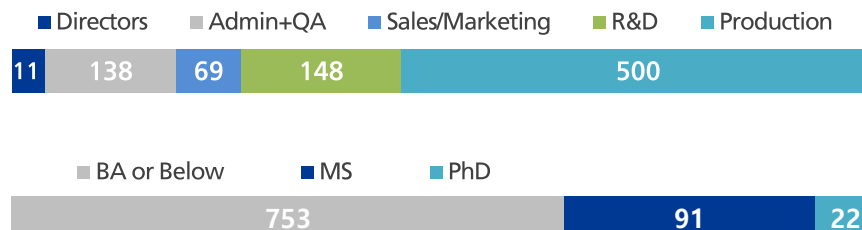
R&D Expenses

- Ratio of R&D expenses to revenue
- R&D investments (\$ million) (Parent company basis)



Number of Employees

866 in Total



(As of December 31st, 2023)

Appendix 3. Consolidated Financial Statement

Balance Sheet

(Unit: \$ Million)

Account Title	2019	2020	2021	2022	2023
Current Assets	117.3	145.4	188.8	197.4	159.6
Non-current Assets	128.2	133.7	201.4	211.3	216.2
Total Assets	245.5	279.1	390.2	408.7	383.7
Current Liabilities	38.0	28.8	34.9	67.8	107.2
Non-current Liabilities	24.7	47.5	96.4	63.9	43.1
Total Liabilities	62.7	76.3	131.3	131.6	150.2
Capital Stock	6.2	6.2	6.2	6.3	10.6
Capital Surplus	41.6	41.9	42.0	42.7	32.1
Other components of equity	(5.8)	(6.0)	(6.0)	(4.2)	(3.9)
Accumulated Other Comprehensive Income	(1.8)	(3.4)	21.2	20.6	16.8
Retained Earnings	140.3	160.8	180.5	194.5	162.8
Non-controlling interest	2.3	3.3	14.9	17.2	14.7
Total Equity	182.8	202.8	258.9	277.1	233.5

Income Statement

(Unit: \$ Million)

Account Title	2019	2020	2021	2022	2023
Revenue	172.6	185.2	211.8	240.8	203.9
Cost of Goods Sold	93.7	98.1	119.0	144.9	122.4
Gross Profit	78.9	87.1	92.8	95.9	81.6
SG&A	51.5	59.4	61.1	77.9	73.2
Operating Profit	27.4	27.7	31.7	18.0	8.4
Non-Operating Profit	0.5	6.1	(2.4)	1.5	(2.2)
Equity Method Profit/Loss	(1.0)	(2.0)	(1.3)	(2.1)	(1.5)
Income Before Tax	26.9	31.8	27.9	17.4	4.7
Tax Expenses	5.8	7.0	5.1	3.0	2.1
Net Profit	21.1	24.8	22.9	14.5	2.6

Based on K-IFRS / Exchange Rate Assumption: 1 USD = 1,300 KRW