

# Conquer Cancer through AI

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# Company Overview

2023 INVESTOR RELATIONS

# About Lunit

Since 2013 | 1<sup>st</sup> Generation Medical AI Company | Listed in KOSDAQ since 2022

## Global Investors

Backed by leading global investors

- Raised \$122M while unlisted
- 15% of global shareholders after IPO
- Top 7% of KOSDAQ listed 1,600 companies in Korea

**Foreign investment = \$73M 60%**

## Global Partners

Established partnerships with industry giants

**Chosen by leading medical device companies**

**Chosen by leading bio companies**

**Multiple global pharmas**

## Industry Leader

Best-in-class AI technology and products

- Unprecedented “AA-AA” highest level in technology assessment among healthcare companies
- Best performance proven by direct comparison with global competitors in various studies
- Highest market cap. among listed medical AI companies (2023.09)

**Market Cap. of medical AI companies in Korea**

**5x higher than 2nd place company**

## Commercial Success

Successfully scaling out revenue growth

- High revenue growth with 312% CAGR (2019 - 2022)
- Lunit INSIGHT (X-RAY) → First company globally to exceed \$8M in sales

Year	Revenue (\$ Million)
2019	0.2
2020	1.1
2021	5.1
2022	10.7
2023.3Q (Accumulated)	15.2

Unit: \$ Million

# Core Competence

## #1 Technology



## Strong Foundation

### Tech-based startup

- Six cofounders from KAIST
- First deep learning startup in Korea
- Top-tier AI researchers

AI Researchers

47 16%

Software Developers

66 23%

### Cofounders



**Anthony Paek**  
Former CEO &  
Executive Chairman



**Sunggyun Park**  
Cancer Screening  
Chief Product Officer



**Kyunghyun Paeng**  
Oncology  
Chief Product Officer



**Donggeun Yoo**  
Chief AI Officer



**Minhong Jang**  
Cancer Screening  
Chief Business Officer



**Jeongin Lee**  
VP of IT &  
Infrastructure



## Best-in-Class A.I.

### Global leader in AI technology

- Top-tier proprietary AI technology
- 30+ papers presented in top AI conferences
- Large-scale medical data for R&D (N = +4 million cases)

### Top Ranked in AI Competitions

2015

Main Task  
(CLS-LOC)

IMAGENET

1	Microsoft	
5	Lunit	
7	Google	

2016

MICCAI Grand  
Challenge

Tumor Proliferation  
Assessment

1	Lunit	
2	IBM	
3	Microsoft	

2017

Camelyon

CAMELYON17

1	Lunit	
2	Harvard Univ.	
3	Eindhoven Univ. of Tech	



## Global Recognition

### International spotlight

- The **only Korean company** spotlighted by World Economic Forum, CB Insights



2020 / 2022 / 2023

TECHNOLOGY PIONEER /  
GLOBAL INNOVATOR /  
ASSOCIATE PARTNER



2017

CB Insights  
AI 100



2019 / 2020 / 2021

CB Insights  
DIGITAL HEALTH 150

Forbes

Newsweek

BBC

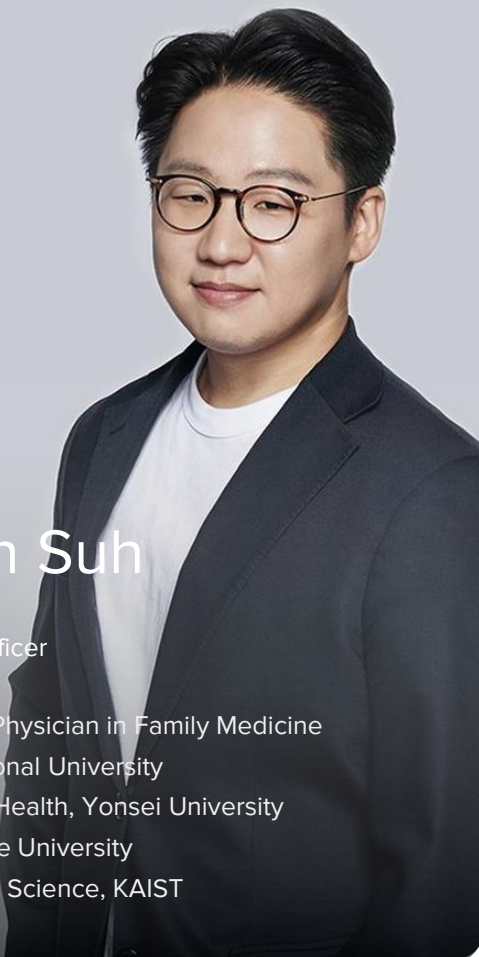
BIOTECH  
FIERCE

MIT  
TECHNOLOGY  
REVIEW

# Core Competence

## #2 Medical Expertise

### CEO Profile



**Brandon Suh**

MD, MBA, MPH  
Chief Executive Officer

- Board-Certified Physician in Family Medicine
- M.D., Seoul National University
- M.P.H. in Public Health, Yonsei University
- M.B.A., Kyunghee University
- B.A. in Biological Science, KAIST

### 13 Full-time Physicians at Lunit



**Chanyoung Ock**  
Oncology



**Kihwan Kim**  
Radiology



**Taebum Lee**  
Pathology



**Yoojoo Lim**  
Oncology



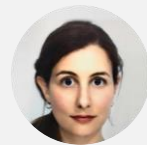
**Sanghyup Lee**  
Radiology



**Wonkyung Jung**  
Pathology



**Changho Ahn**  
endocrinology



**Nicol Panarisi**  
Radiology



**Sooick Cho**  
Dermatology



**Seunghwan Shin**  
Rheumatology

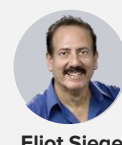


**Ambika Seth**  
Radiology

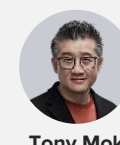


**John Jongseok Ahn**  
General Physician

### Renowned Scholars as Advisors



**Eliot Siegel**  
Radiologist  
Radiology IT  
KOL



**Tony Mok**  
Oncologist  
Board member  
of AstraZeneca



**Linda Moy**  
Breast Radiologist  
KOL / RSNA  
Vice-chair



**YoungKwang Chae**  
Oncologist  
KOL in  
immunotherapy



**Yung-jue Bang**  
Oncologist  
KOL in Korea

**+280** Publications in Major Peer-reviewed Journals



**+100** Research Partnerships



# Core Competence

## #3 Global Business

### Global Talents at Lunit



**Ken Nesmith**  
CEO of Lexent Bio  
(acquired by Roche/  
Foundation Medicine)  
MIT, Wharton School



**Chris McKinney**  
Business Development  
lead at GE and  
TeraRecon



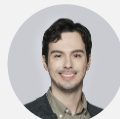
**Michael Hreczuck**  
Business Development  
lead at Tempus and  
HTG Molecular



**Antoine Khoury**  
Business Development  
lead at Hologic and  
Teleflex



**Thijs Kooi**  
Published AI research  
papers in top AI  
journals



**Sergio Pereira**  
Leading AI researcher  
in medical imaging



**Wei-cheng Wang**  
Software  
Development lead at  
Yahoo and Foxconn



**Ambika Seth**  
Radiologist, Clinical  
research for AI startups

**International Colleagues**  
(non-Koreans)

**53** 18%

### Global Investors Back Lunit

- **\$73M** funded by overseas investors (60% of total funding)
- First Korean medical device company invested by major US healthcare VCs (Pre-IPO funding round)
- Multiple strategic investments by industry leaders



### International Shareholders by Company (2023.09.30)



**+15%**

- Top 7% of 1,600 KOSDAQ listed companies
- 1st among Healthcare Technology sectors in Korean stock market



**10%**

Listed  
Medical AI  
companies



**< 5%**

### Global Sales Channel through Strong Business Partnerships

**50%**

Global market share  
of device partners



GE Healthcare



**80%**

US Oncologists using  
Guardant Health products

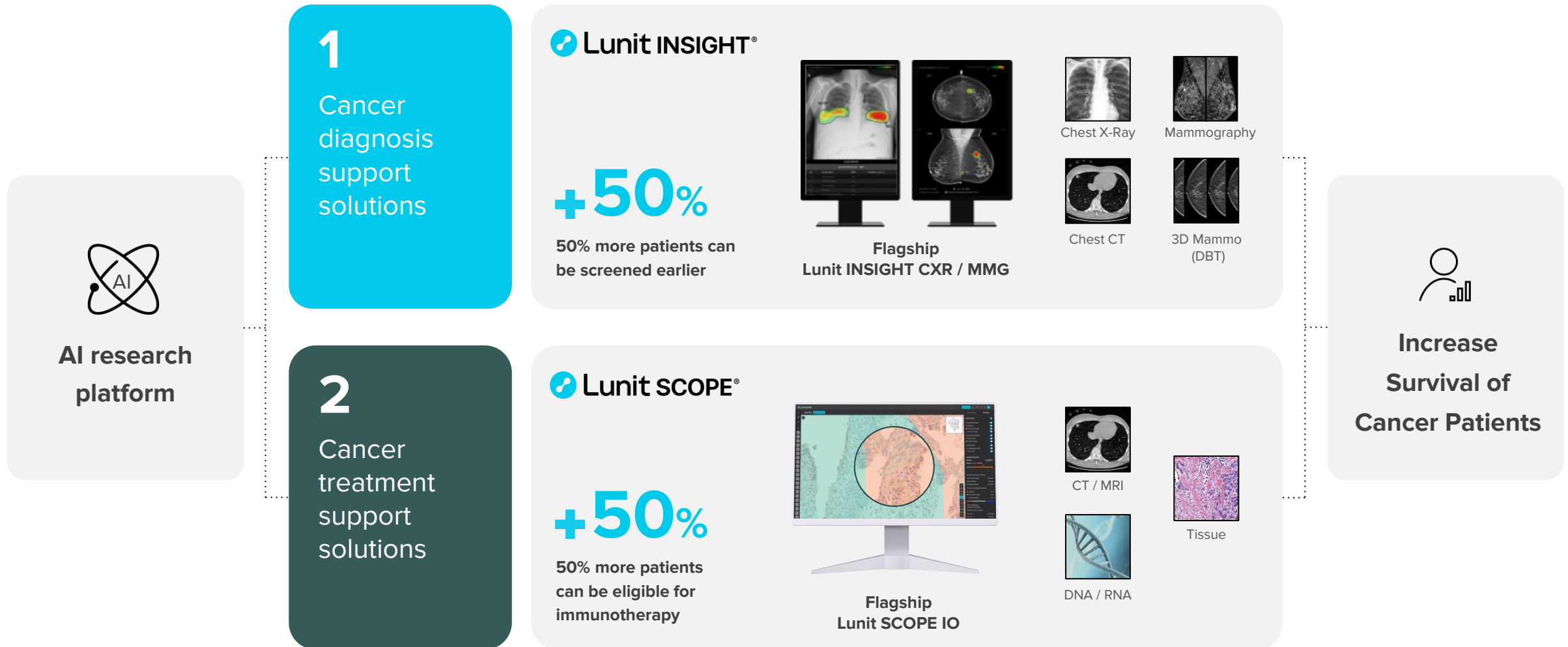


### Global Big Pharma

Currently discussing  
research/collaboration agreement  
with multiple big pharmas

# Conquer Cancer through AI

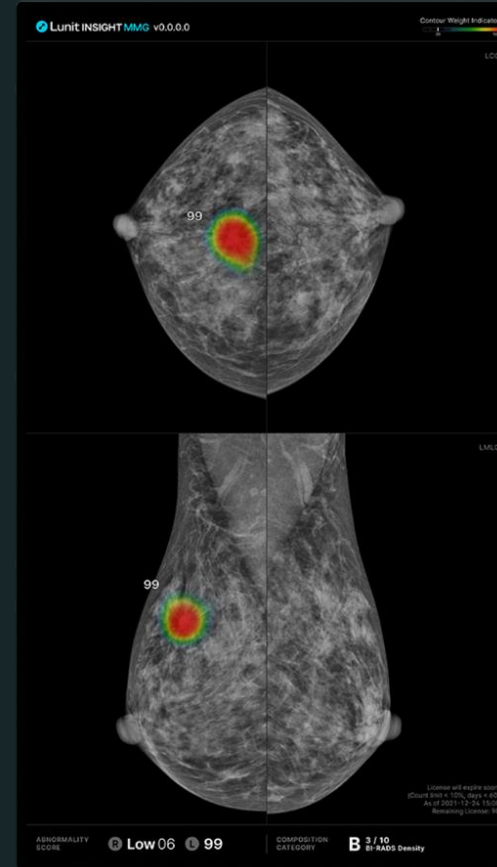
Increase cancer survival through AI-powered cancer diagnosis and treatment





# Lunit INSIGHT<sup>®</sup>

2023 INVESTOR RELATIONS



Lunit INSIGHT MMG<sup>®</sup>



Lunit INSIGHT CXR<sup>®</sup>

# Accurate and Effective Detection of Cancer

## Needs

### Current limitations in cancer diagnosis/screening

Missed Cases

**30%**<sup>1) 2)</sup>

Unnecessary Tests

**95%**<sup>2)</sup>

False Negative Rate<sup>3)</sup>

Chest X-Ray and Mammography

False Positive Rate<sup>4)</sup>

Mammography

### Focusing on major cancers

Lung Cancer

**1st**<sup>5)</sup>

Global incidence and  
mortality rate

Breast Cancer

**2nd**<sup>5)</sup>

Global incidence rate

1) NLST trial, NEJM 2012

2) Breast Cancer Screening Consortium data

3) False Negative Rate : Falsely diagnosed as not cancerous

4) False Positive Rate : Falsely diagnosed as cancerous, but normal

5) SEER Cancer Statistics Review, 1975-2015

## Product

### Major Lung Diseases

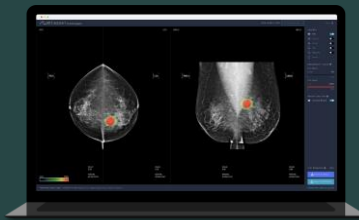
Lung Cancer, Tuberculosis, Pneumonia, etc.

**Lunit INSIGHT CXR®**



### Breast Cancer Detection

**Lunit INSIGHT MMG®**



## Effect

### Increase interpretation accuracy and efficiency



Interpretation  
Accuracy

**↑20%**



Earlier  
Diagnosis

**↑50%**



Unnecessary  
Recalls  
Mammography

**↓30%**



Exam Result  
Turnaround Time

**x10 faster**

Lunit INSIGHT Value

# Higher Reading Accuracy | Better performance than specialists, proven in major studies

Evidence

Extensively validated through studies

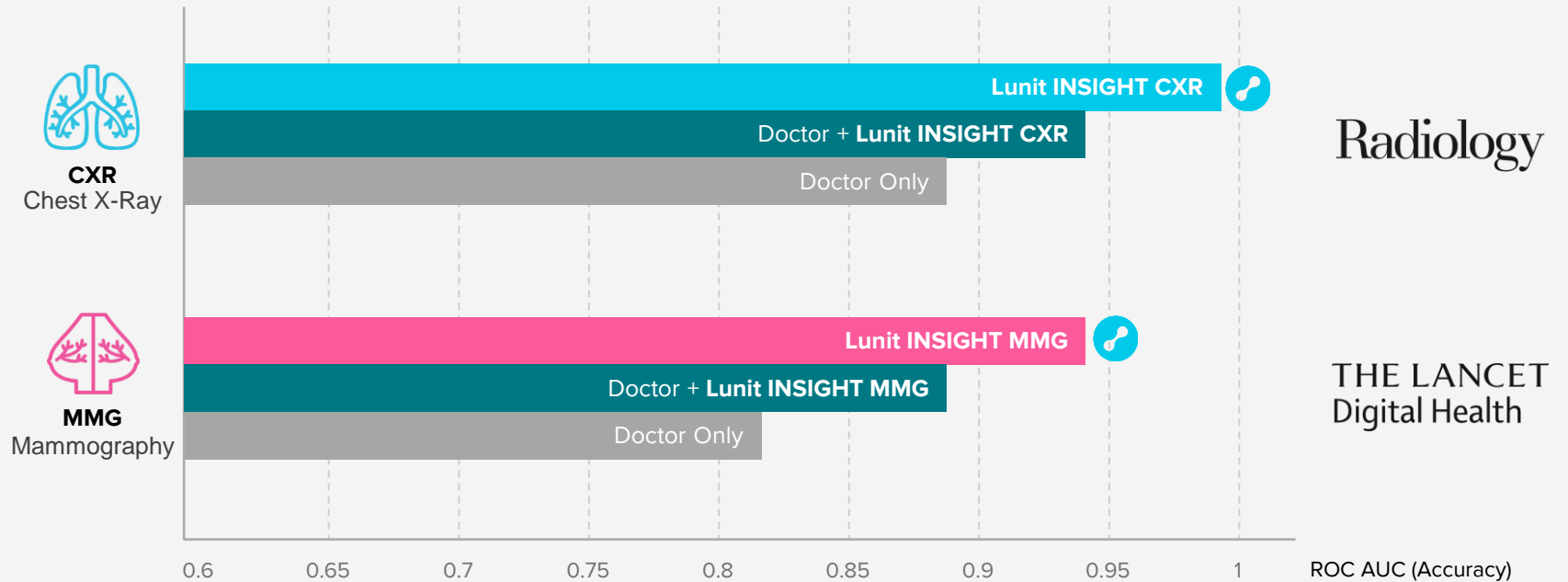
+170

Studies/abstracts

- THE LANCET Digital Health
- JAMA Oncology
- Radiology
- JAMA Network | Open.
- RSNA
- SCIENTIFIC REPORTS
- Clinical Infectious Diseases
- European Radiology
- BIR The British Institute of Radiology
- BMC Pulmonary Medicine
- AJR
- ACTA RADIOLOGICA
- JTD
- THE LANCET Regional Health Americas
- EUROPEAN RESPIRATORY journal

Performance

Clinically proven to show excellence in medical image analysis



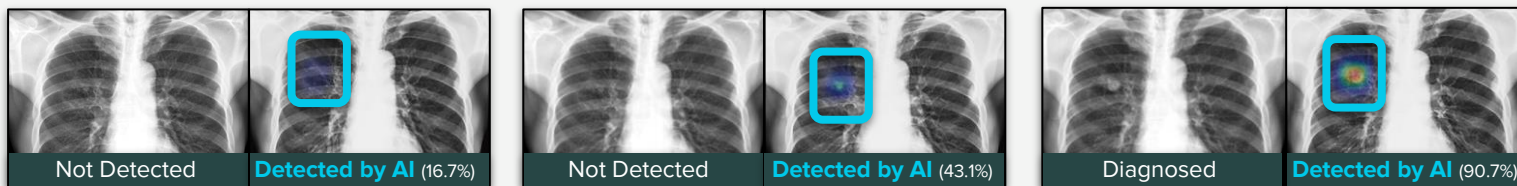
CXR reference : Ju Gang Nam, "Development and Validation of Deep Learning–based Automatic Detection Algorithm for Malignant Pulmonary Nodules on Chest Radiographs ", *Radiology* Vol. 290, No. 1(2018):218–228, doi:10.1148/radiol.2018180237  
 MMG reference : Hyo-Eun Kim, "Changes in cancer detection and false-positive recall in mammography using artificial intelligence: a retrospective, multireader study", *The Lancet Digital Health* Vol 2, No. 3(2020):e138-e148, doi:/10.1016/S2589-7500(20)30003-0

# Earlier Diagnosis | Higher reading accuracy leads to earlier diagnosis of cancer

## When Using Lunit INSIGHT

**50%** of lung cancer patients can be diagnosed earlier when analyzed by Lunit INSIGHT CXR

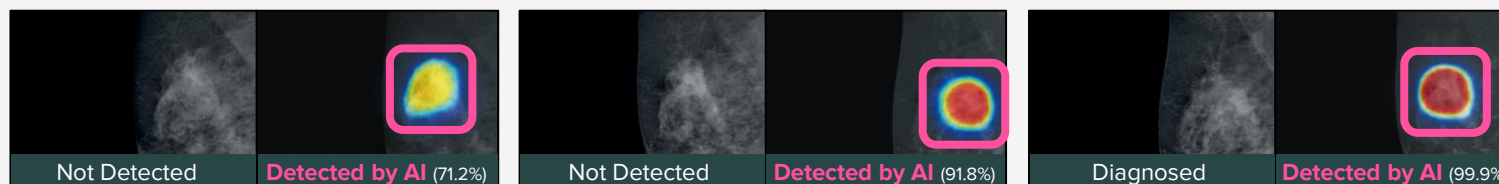
Case) 2013 .....> 2014 .....> 2016



54-year-old male: AI found a lung cancer that was missed 3 years ago

**40%** of breast cancer patients can be diagnosed earlier when analyzed by Lunit INSIGHT MMG

Case) 2008 .....> 2009 .....> 2010



59-year-old female: AI found a breast cancer that was missed 2 years ago

## Impact of Earlier Diagnosis

Significance of Early Diagnosis in Lung Cancer

**4.3x Survival Increase**

5-Year-Survival Diagnosed Stage 1,2

**73%**

5-Year-Survival Diagnosed Stage 3, 4

**18%**

Reference: AJCC 8th Edition

Significance of Early Diagnosis in Breast Cancer

**1.4x Survival Increase**

5-Year-Survival Diagnosed Stage 1,2

**96%**

5-Year-Survival Diagnosed Stage 3, 4

**65%**

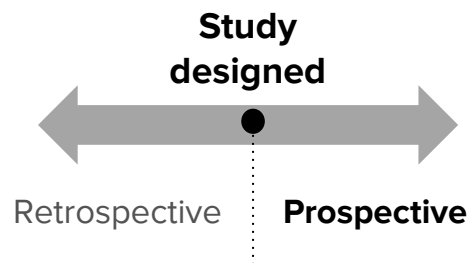
Reference: AJCC 8th Edition

Lunit INSIGHT Value

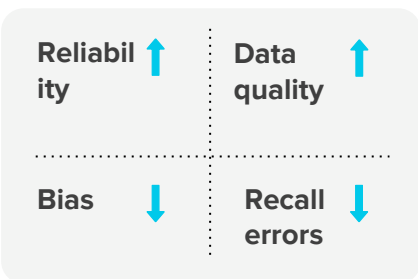
# Real World Evidence | Building solid evidence through prospective studies

## Study Method

What is prospective study?



Outcome is measured after the baseline state of the subjects is determined and controlled intervention applied.



Higher possibility to receive **reimbursement** if backed by prospective studies

## Lunit INSIGHT CXR

### Flagship prospective CXR study

10,476 Patients with chest X-Ray RCT study on 'lung nodule detection rate' at Seoul National University Hospital (Korea)

Outcome	Detection rate of actionable lung nodules	Detection rate of malignant lung nodules
<b>A Group (n=5238)</b> Radiologist + AI	31 (0.59%)	8 (0.15%)
<b>B Group (n=5238)</b> Radiologist only	13 (0.25%)	0 (0.0%)

Radiology  
Large-scale Prospective RCT\*

## Lunit INSIGHT MMG

### Flagship prospective MMG study

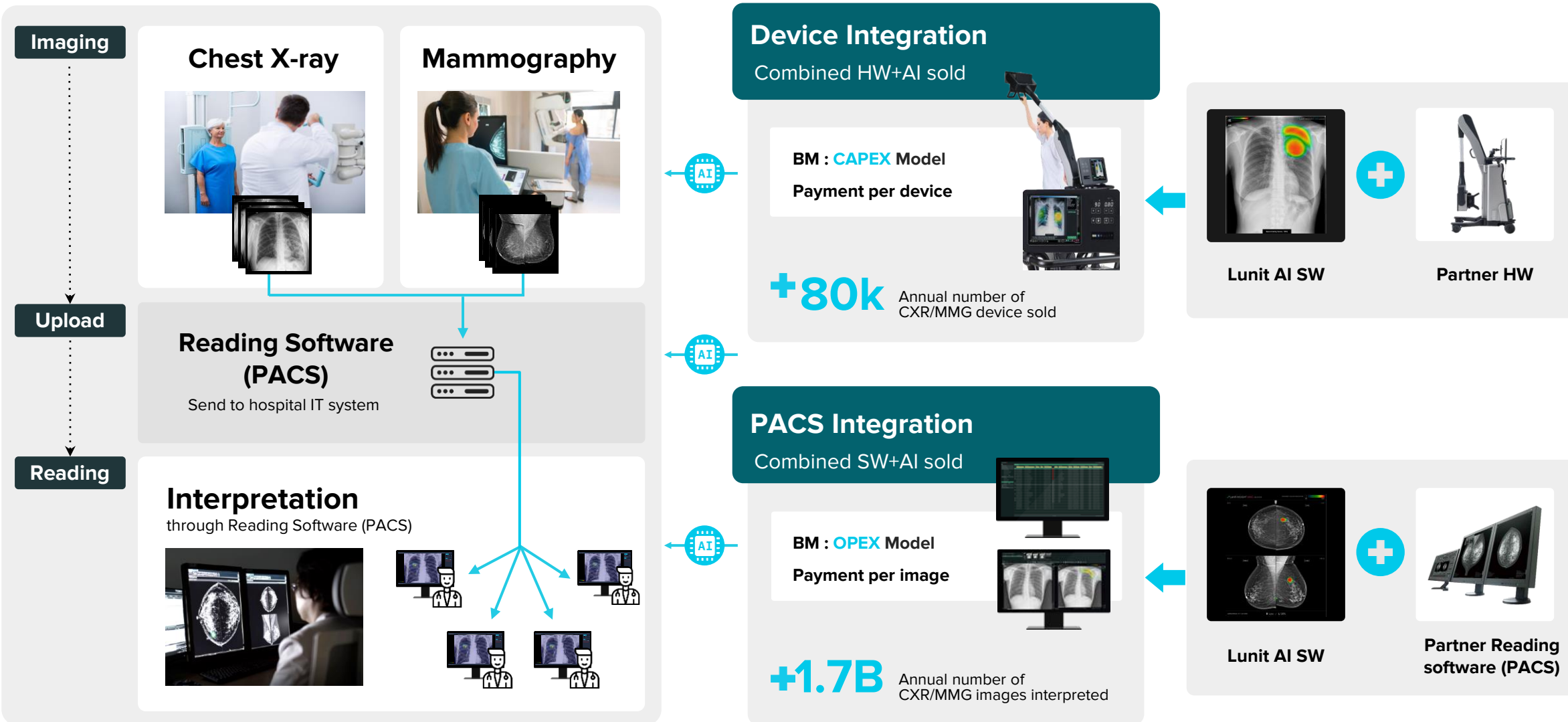
55,579 women screened for breast cancer Study on 'Double Reading' by Karolinska Institutet (Sweden)

\*Randomized Controlled Trial : Research method in which subjects are randomly divided into control and experimental groups for comparison

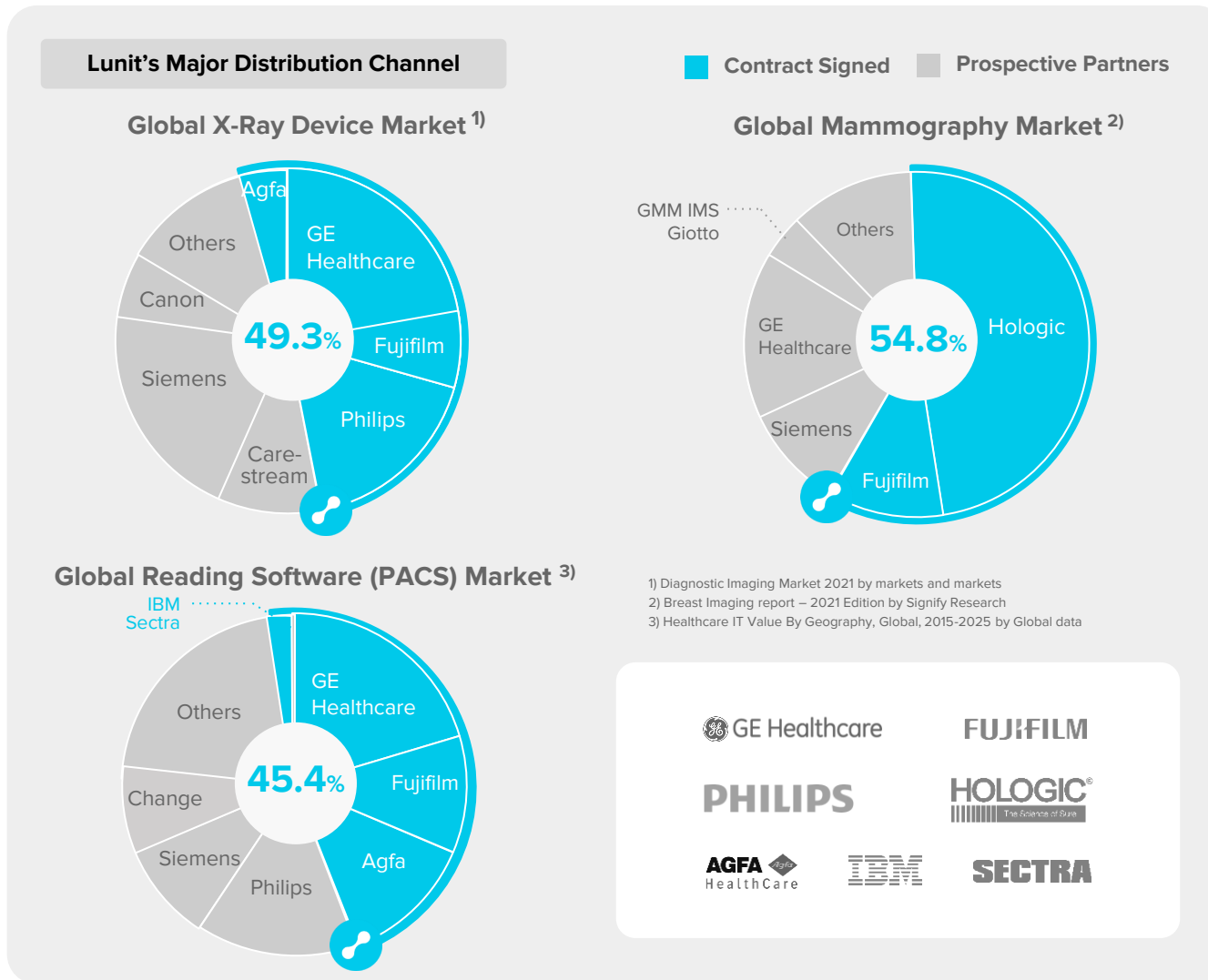
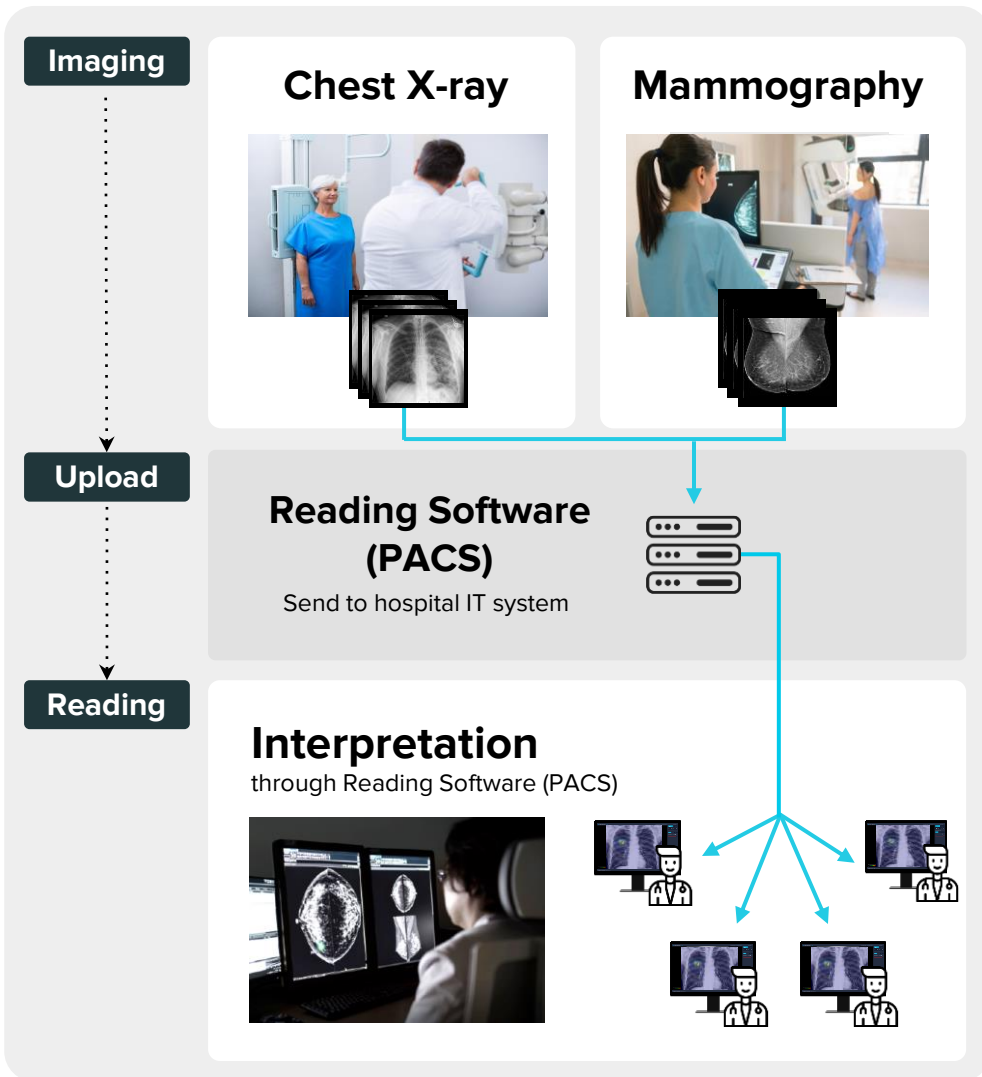
Outcome	Detection rate of cancer per 1,000 women	Recall rate per 1,000 women
<b>1 Radiologist + Lunit INSIGHT MMG</b>	4.3	28
<b>2 Radiologists</b>	4.1	29.3
<b>Lunit INSIGHT MMG</b>	4.1	15.5

THE LANCET Digital Health  
Large-scale Prospective Study

# Distribution through Integration into Imaging Platform



# Scaling out through Global Partnerships



Lunit INSIGHT Superior Performance

# Key Success Factor: Proven to Be Best-in-Class

## Accuracy

### Superior Performance

JAMA Oncology

Salim, et al. JAMA Oncol. 2020 Aug 27.

IF 24.799<sup>1)</sup>



### Comparing 3 Commercial Mammography AI

Retrospective analysis of 8 years of mammography screening compared AI screening performance with data from 739 breast cancer-diagnosed women and 112,924 healthy women

	Lunit	Company A	Company B
AI	Lunit INSIGHT MMG*	Algorithm A	Algorithm B
Sensitivity	<b>81.9%</b>	67.0%	67.4%
Accuracy (ROC AUC)	<b>95.6%</b>	92.2%	92.0%

1) Impact factor, Top 7 among Oncology Journals



**Proven superior performance compared to competitors**

## Research

### Robust Research (SCIE Journals<sup>2)</sup>)

Modality	Company (Country)	# of Journals
Chest X-Ray	<b>Lunit</b> (South Korea)	<b>50</b>
	Qure.ai (USA)	14
	Oxipit (Hungary)	2
	Zebra (Israel)	0
	Others (>10)	None
Mammography	<b>Lunit</b> (South Korea)	<b>25</b>
	ScreenPoint (USA)	15
	DeepHealth (USA)	2
	Zebra (Israel)	1
	Others (>10)	None

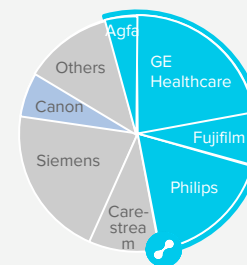
2) SCIE (Science Citation Index Expanded): Citation index originally produced by the Institute for Scientific Information and created by Eugene Garfield



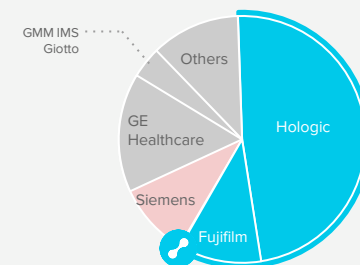
**Robust research with strong clinical evidence in peer-reviewed journals**

## Partnership

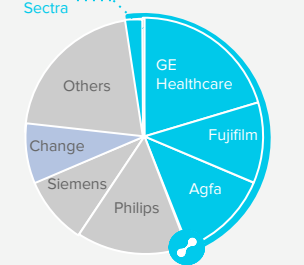
### Larger Market Access



Global X-Ray Device Market



Global Mammography Market



Global Reading Software (PACS) Market

■ Lunit (Partnership Signed)
 ■ Zebra Medical Vision
 ■ Screenpoint



**Access to 50% of market share through global partnership**



# Current Commercialization Status

## Usage

Number of paying sites worldwide <sup>1</sup>

**+3,000**

Global Customers

**90%**

Lunit Users among  
Top 10 Hospitals in Korea <sup>2</sup>

**7**

Chest X-Ray exams in Korea<sup>3</sup>  
Analyzed by Lunit INSIGHT CXR 2021

**10%**

Lunit INSIGHT MMG Users among  
45 Large Hospitals in Korea

**42%**

## Partner Testimonials

“ **First AI company collaboration for our x-ray business** ”

— General Manager K\*\*\*



“This is actually **out first AI company collaboration for our x-ray business. The offering will be available on all of GE digital, fixed, and mobile, and even fluoroscopy.** Leveraging the long-term established expertise, that GE has on x-ray equipment in combination with Lunit’s technology will help to keep up with the customer needs, care deeply about patients and diagnosing physicians or radiologists.”

“ **Felt very high customer satisfaction** ”

— Global Marketing Manager M\*\*\*

**FUJIFILM**

“In Japan especially, many of the elder people cannot move from home to the clinic to take x-ray. Our x-ray with Lunit AI can visit to take x-ray immediately at home, so it is a significant difference. After we used Lunit AI in the market, I didn’t have any complaints. From Fujifilm’s standpoint, whatever AI lunit made has a very high quality, so **we would want to implement it in our x-ray system or PACS system.** Customers have already started to use AI and expect more support.”

“ **Lunit has both strong clinical record and national scalability** ”

— Global Software Product Manager P\*\*\*



“**Lunit has a strong clinical validation track record and is registered in Europe and also more than 19 countries, making it an excellent partner for developing solutions that bring our customers intelligent and definitive answers to their daily needs.**

We believe that the integration of Lunit’s AI in Agfa’s advanced medical imaging workstation will help facilitate more effective clinical workflows in various hospital situations.”

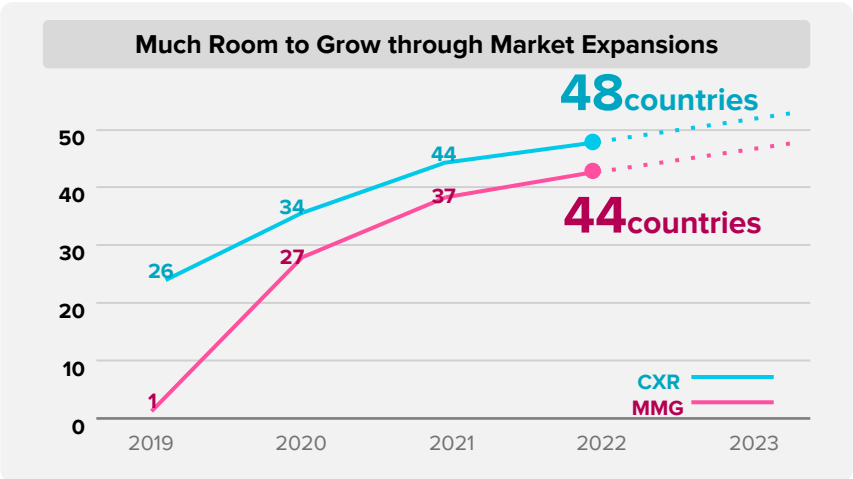
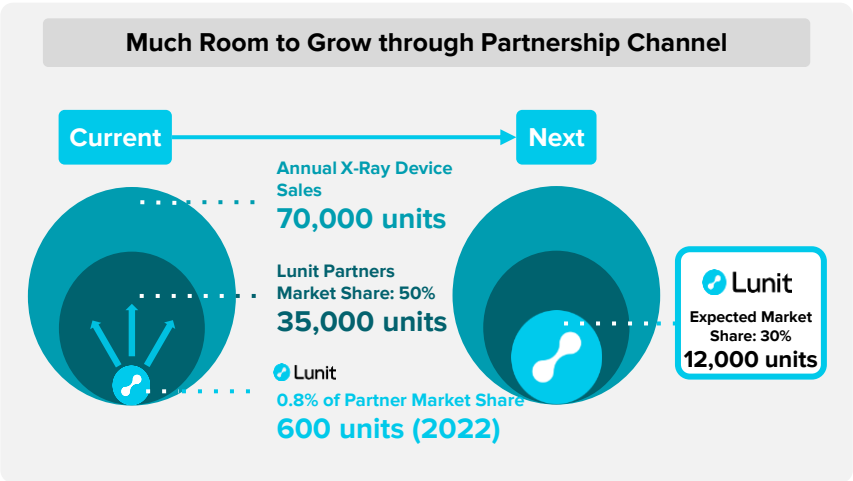
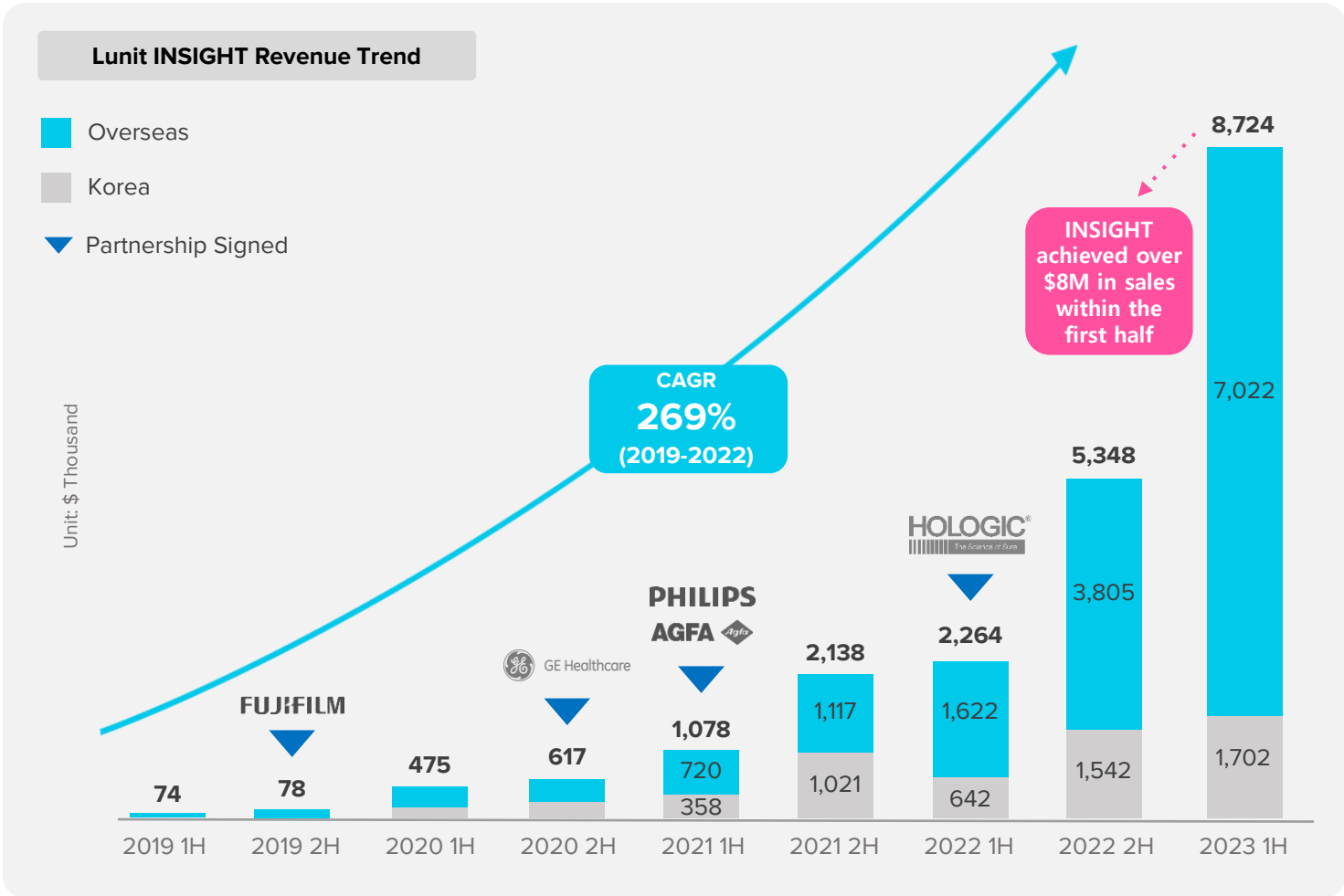
1) Excludes demo and research use; only commercial sales

2) Newsweek. World’s Best Hospitals – South Korea, 2020;

3) Source: KOSTAT.go.kr Appx. 40M Chest X-ray exams performed annually in Korea

# Exponential Revenue Growth Expected to Continue

Scaling out business and sales as partners and markets are activated sequentially



# Next Step

Becoming global standard of care by B2G expansion and successful reimbursement

B to G

National Cancer Screening Programs

First Case

## Selected into Australia's National Breast Cancer Screening Program

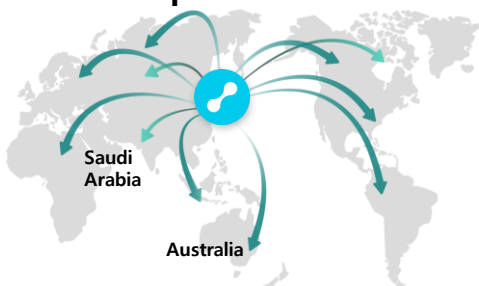
### BSNSW (BreastScreen New South Wales):

A free national breast cancer screening program in NSW (MMG every 2 years to women over 40). The first case globally in which an AI-based solution is being applied in a national cancer screening program.



Expansion

+10 countries in discussion, B2G business expansion expected in near-future



Reimbursement

Europe

## AI can reduce burden caused by Double Reading in Europe

Outcome	Detection rate of cancer per 1,000 women	Recall rate per 1,000 women
1 Radiologist + Lunit INSIGHT MMG	4.3	28
2 Radiologists	4.1	29.3
Lunit INSIGHT MMG	4.1	15.5

AI + one reader outperforms Double Reading  
 Detection Rate of Cancer  $\Delta$  / Recall Rate  $\nabla$

Clinical evidence to replace one reader of double reading system (unique in Europe)

## Possibility of reimbursement in Europe $\Delta$ $\Delta$

EU, 암 정복 위해 우선 '조기 진단'에 힘 쓴다  
 "2025년까지 대상 인구 90% 유방암·자궁경부암·결장 직장암 검진 받을 수 있도록 한다"

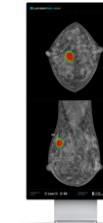
최운수 기자 | jysc0229@yakup.com | 기자가 쓴 기사 더보기 | 인력 2022.08.29 06:00 | 수정 2022.08.29 06:01

Korea

## Government Regulation $\nabla$ / Support $\Delta$



**Lunit INSIGHT CXR**  
 2020.09  
 Selected as an Innovative Medical Device

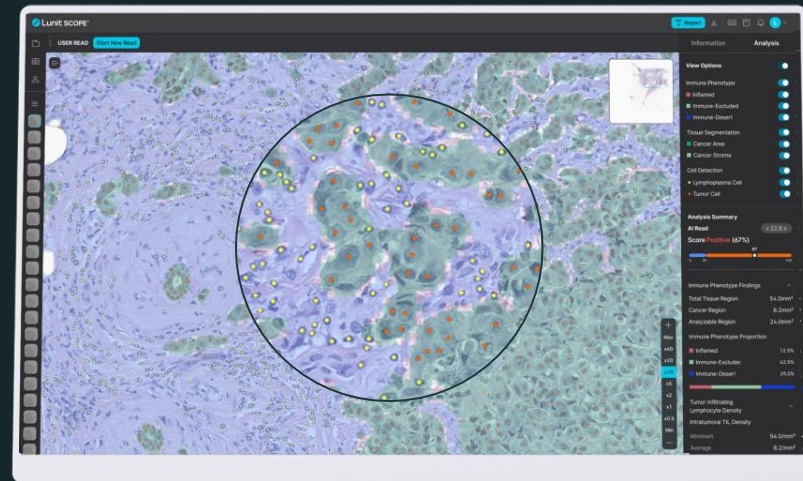


**Lunit INSIGHT MMG**  
 2021.09  
 Selected as an Innovative Medical Device

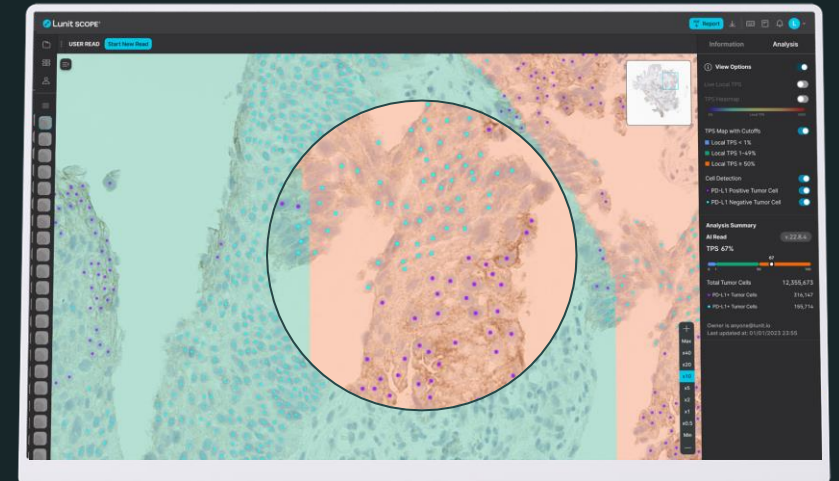
## Possibility of reimbursement in Korea $\Delta$ $\Delta$

# Lunit SCOPE<sup>®</sup>

2023 INVESTOR RELATIONS



Lunit SCOPE IO



Lunit SCOPE uIHC

# Personalized Approach Is Key to Cancer Treatment

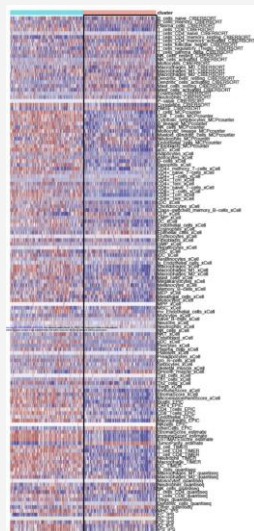
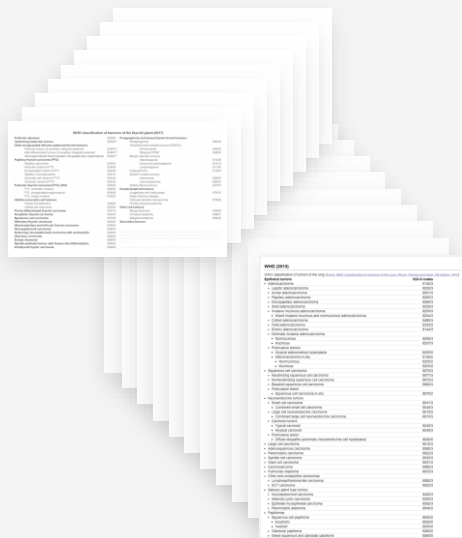
## High Complexity in Cancer

Even cancers in the same organ have different biological characteristics and prognoses.

Morphological Type **1,000+** Mutation Type **1,000+** Tumor Heterogeneity **10+**

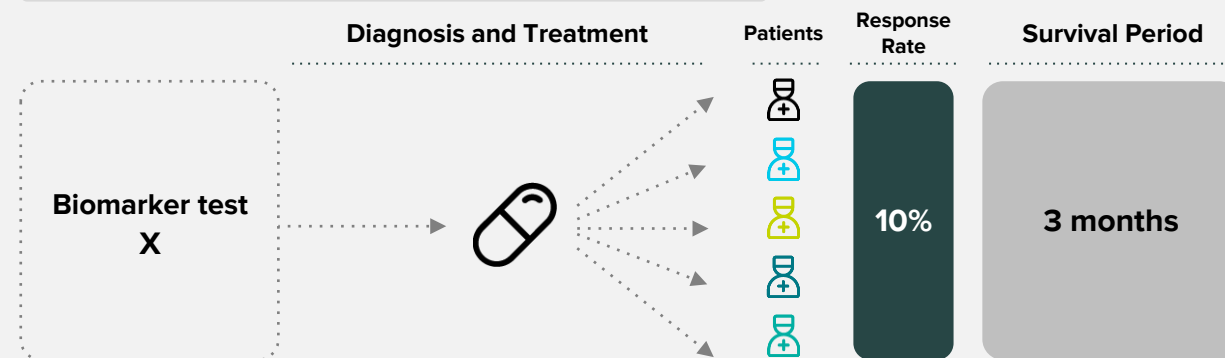
WHO's Morphological Classification

Gene Mutations Causing Cancer

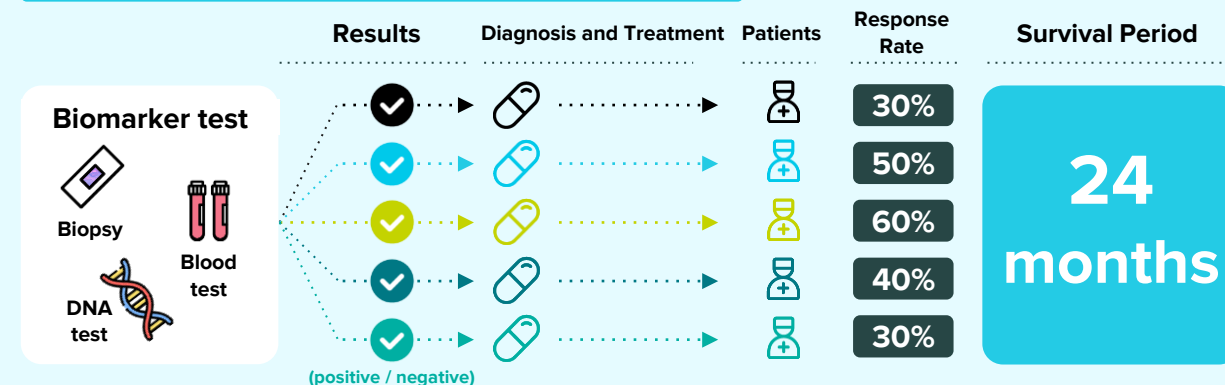


## KEY: Personalized Treatment by Biomarkers

Traditional: One general treatment for all cancer patients



## Now & Future: Biomarker-based personalized treatment



Lunit SCOPE Development

# Lunit SCOPE: Novel Biomarker to Immunotherapy

1st generation (1940 - )

**Chemotherapy**  
Biomarker test X



Detects and attacks fast-growing cells recognized as cancer cells

2nd generation (2000 - )

**Targeted Therapy**  
Biomarker test O = Genetic test

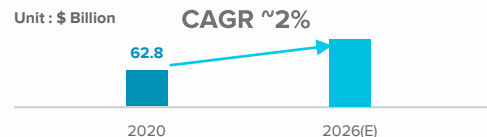


Directly targets certain DNA mutations

**Biomarker CDx**

EGFR KRAS BRAF BRCA MET ... **Total +20**  
ALK ROS1 ER/PR KI67 HER2

**Targeted Therapy Market**



Source: Targeted Therapeutics Market by Transparency Market Research

**Saturated Market**

3rd generation (2015 - )

**Immunotherapy**  
Biomarker test O = Analyzing tissue cells



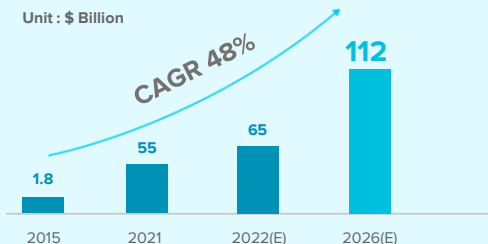
Activates immune cells to kill cancer cells

Not related to DNA mutations

**Biomarker CDx**

PD-L1 (2015~) MSI (2017~) TMB (2020~) **Total 3**

**Immunotherapy**



Source: Disclosures from pharmas, The Business Research Company

**Emerging Market**

**Optimized target for Lunit with large-scale AI image processing technology**

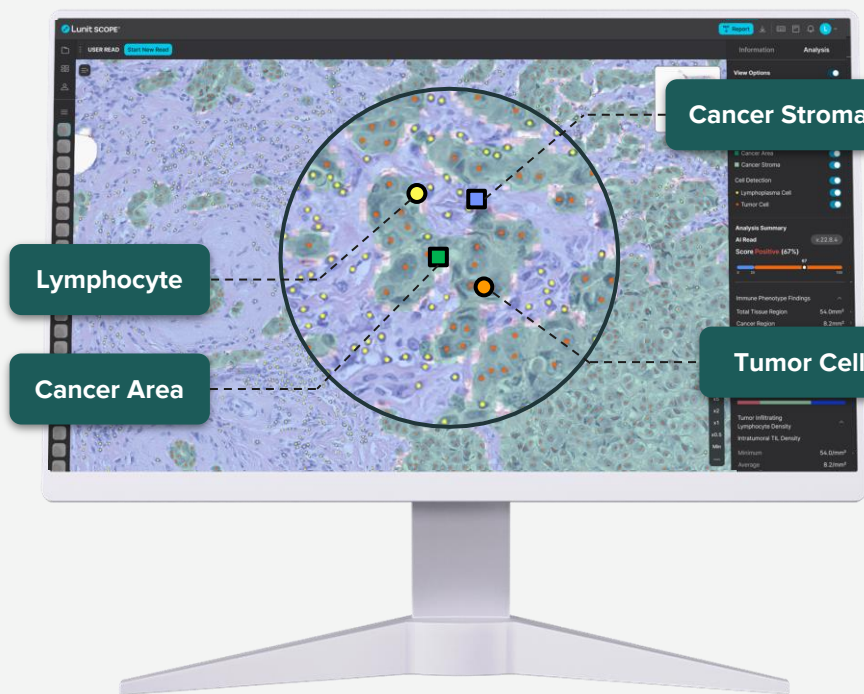
## Lunit SCOPE Description

# Next Generation AI-powered Biomarker

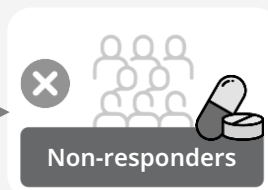
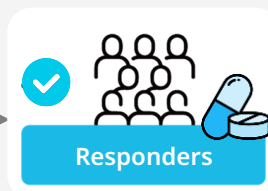
## Flagship : Lunit SCOPE IO

### Lunit SCOPE IO<sup>®</sup>

Category : Biomarker based on tumor microenvironment analysis  
AI Biomarker classifying patients who can be treated with immunotherapy



#### Analysis Result



Analyzing the immune cell patterns in patient's tissue slide images through AI ; Classifying them into Positive or Negative

## Others : Lunit SCOPE Next

### Lunit SCOPE Universal IHC

Category : Biomarker to quantify protein expression and predict response  
AI Biomarker classifying patients who can be treated with ADC



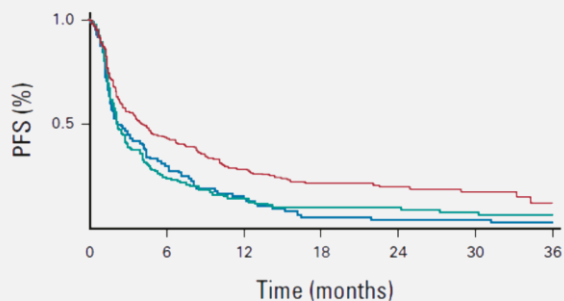
- Lunit SCOPE PD-L1
- Lunit SCOPE HER2
- Lunit SCOPE ERPR
- ⋮
- Lunit SCOPE XXX (Later)

# Accurately Identifies Patients Responsive to Immunotherapy

## High Prediction of Response to Immunotherapy

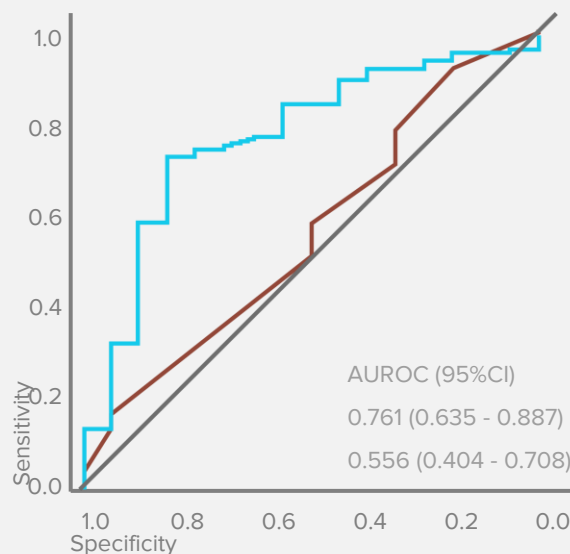
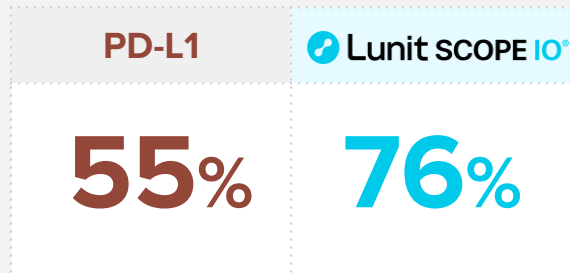
SCOPE Classification	Immune Phenotype	mPFS (months)	HR (95% CI)
Positive	Inflamed	4.1	Ref
Negative	Excluded	2.2	1.52
	Desert	2.4	1.58

PFS	No.	ORR (%)	mPFS (95% CI)	HR (95% CI)	p
Inflamed	288	26.8	4.1 (2.8 to 6.2)	NA	NA
Immune-excluded	192	11.5	2.2 (2.0 to 2.8)	1.52 (1.23 to 1.88)	9.6 x 10 <sup>-5</sup>
Immune-desert	98	11.2	2.4 (1.7 to 4.2)	1.58 (1.23 to 2.03)	4.1 x 10 <sup>-4</sup>



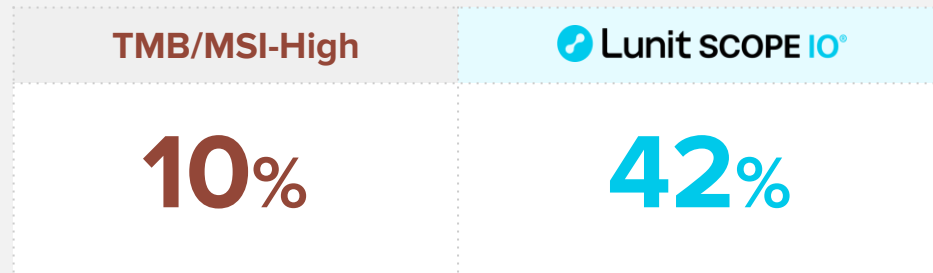
Reference :Sehsoon Park, "Artificial Intelligence–Powered Spatial Analysis of Tumor-Infiltrating Lymphocytes as Complementary Biomarker for Immune Checkpoint Inhibition in Non–Small-Cell Lung Cancer", *Journal of Clinical Oncology* Vol 40, No. 17(2022):1916-1928, doi:10.1200/JCO.21.02010

## Accuracy Comparison Versus PD-L1 (already used biomarker)



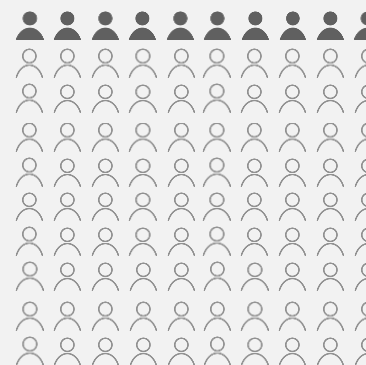
Journal of Clinical Oncology

## Patient Selection Comparison Versus TMB/MSI (already used biomarker)

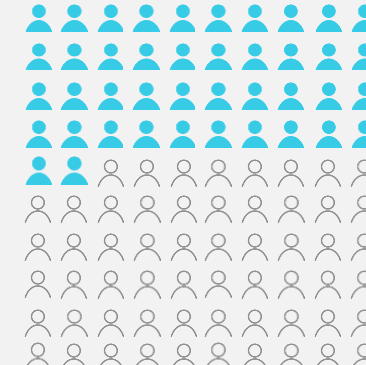


Analysis on PD-L1(-) patients who would not be eligible for immunotherapy

10% of patients are identified to respond to immunotherapy



42% of patients are identified to respond to immunotherapy

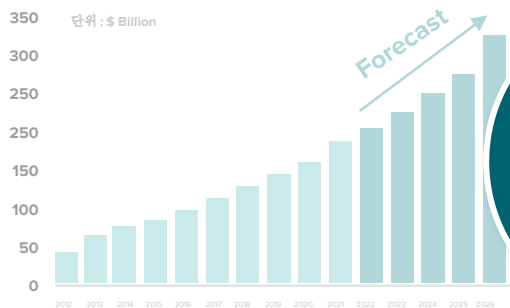


ASCO



Lunit SCOPE Market

# Use of Biomarkers Is Standard in Cancer Medical Treatment



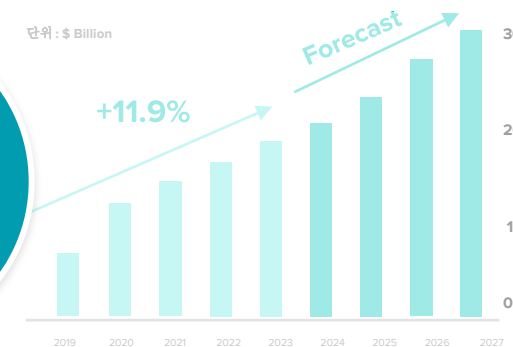
Market Size  
**+\$300B**  
CAGR 12%

Pharmaceutical  
Companies  
Cancer  
Drugs



Cancer Diagnostics  
Companies  
Biomarkers

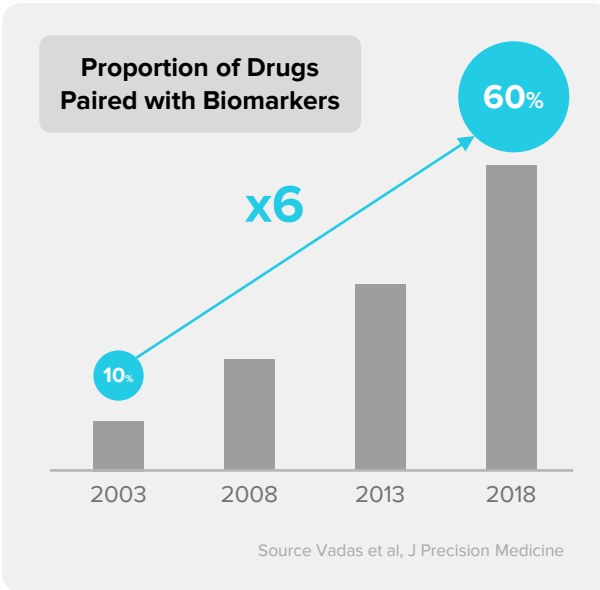
Market Size  
**+\$27B**  
CAGR 11.9%



Source: IQVIA, 2021-2026 Global size and CAGR forecast of Anticancer drugs

출처: Allied Market Research, Cancer Biomarkers Market, 2020.

## Trend in Biomarker (CDx) Use



Source Vadas et al, J Precision Medicine

## Global Cancer Drugs (solid-tumor)

Revenue Ranking					Unit: B\$
No	Drug	Pharma	Revenue 2022	FDA Approved Biomarker (CDx)	
1	Keytruda	Merck	20.94	PD-L1, MSI, TMB	
2	Opdivo	BMS	8.25	PD-L1	
3	Tagrisso	Astra-Zeneca	5.44	EGFR	
4	Ibrance	Pfizer	5.12	ER/PR	
5	Perjeta	Roche	4.30	HER2	
6	Tecentriq	Roche	3.91	PD-L1	
7	Imfinzi	Astra-Zeneca	2.78	PD-L1	
8	Lynparza	Astra-Zeneca	2.64	BRCA	
9	Herceptin	Roche	2.25	HER2	
10	Avastin	Roche	2.23	-	

## Successful CDx Cases

FDA APPROVED	Case 1	Case 2	Case 3
<b>Biomarker</b>	EGFR	HER2	TMB
<b>CDx Product</b>			
<b>Paired Drugs</b>	 AstraZeneca		

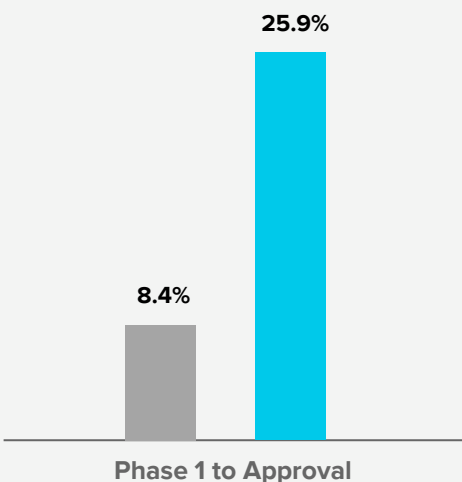
# Why Pharma Actively Use Biomarkers (CDx)

Use of biomarkers is key to successful clinical trials

Biomarker leads to 3x higher success rate

Higher ↑  
Chance of Approval

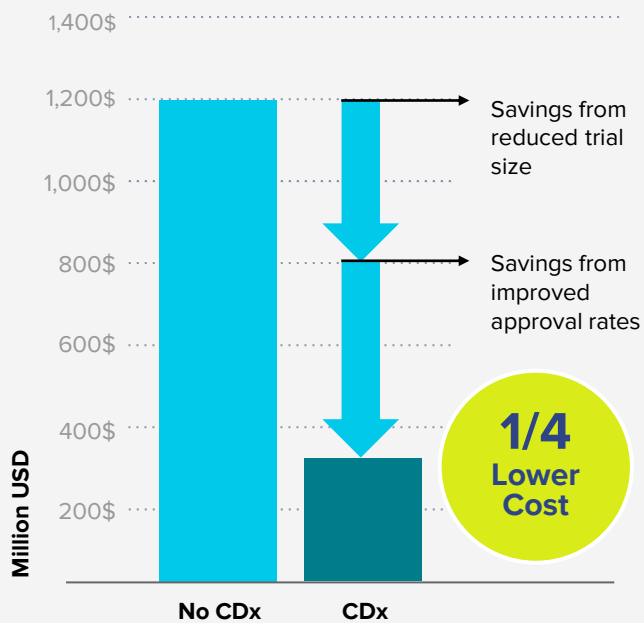
**3x**  
Success Rate



Source: ARK investment Management LLC

Biomarker leads to 1/4 lower cost for clinical trials

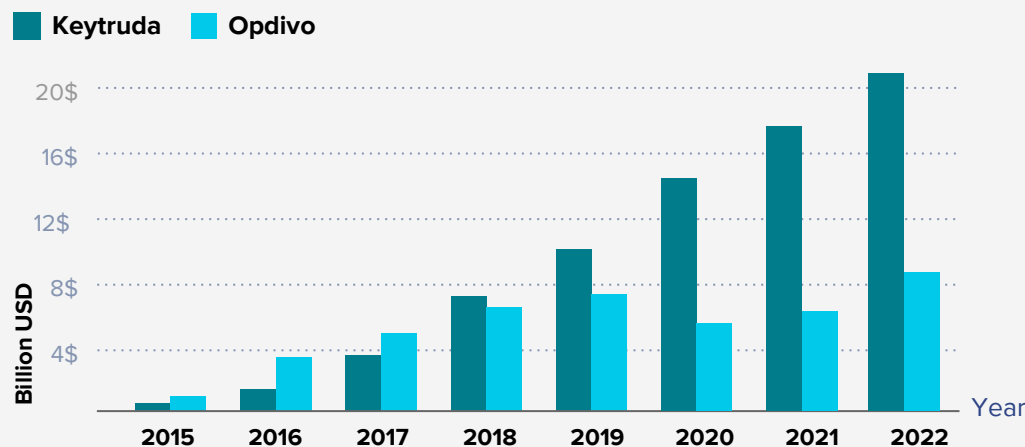
Cost of each anticancer drug



Source: ARK investment Management LLC

Biomarker leads to more frequent use of paired drugs and sales performance

How MSD's Keytruda rapidly surpassed BMS's Opdivo and became the No.1 cancer drug globally



**75%** of physicians prefer Keytruda because it helps identify how well a patient is likely to respond (Survey by ASCO)

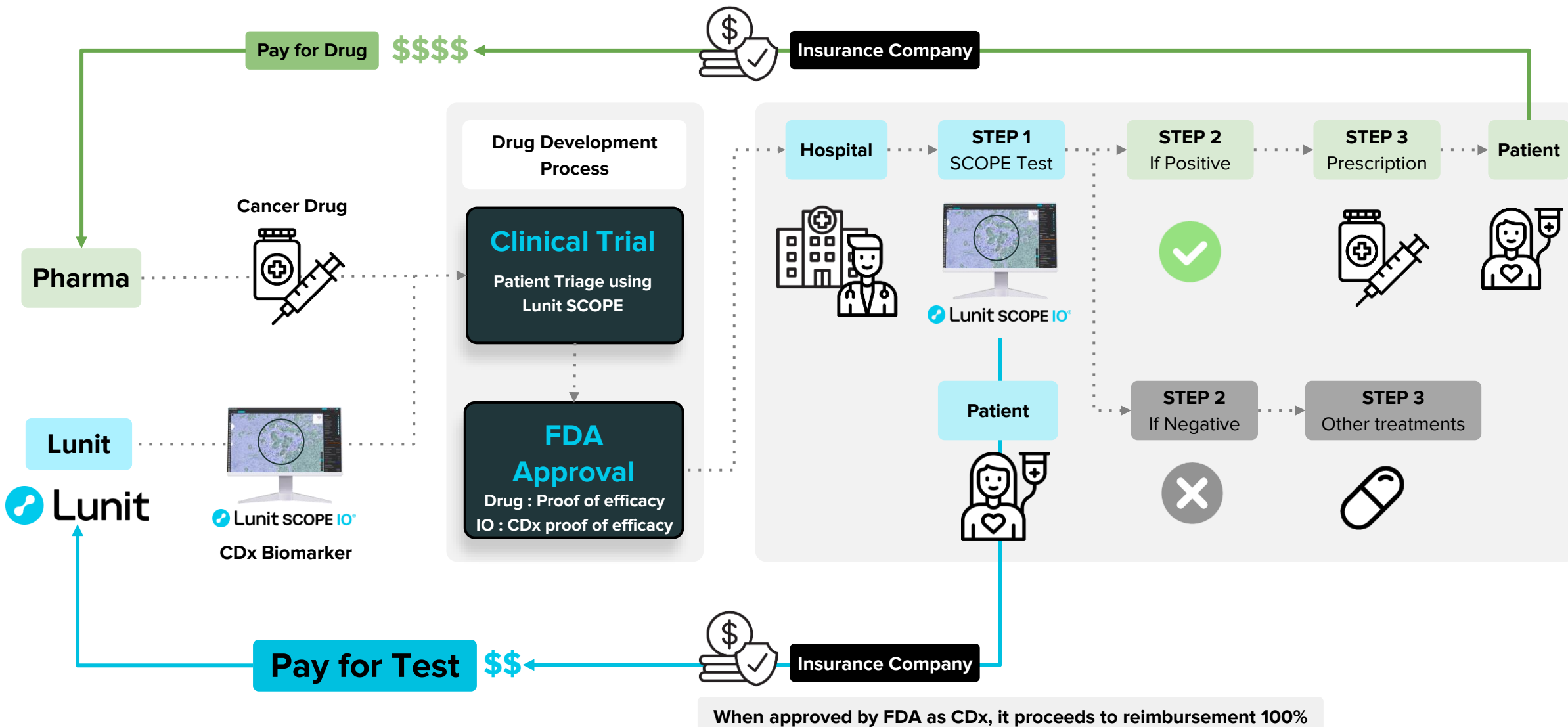


The reason why drugs with biomarker/CDx are best-selling despite narrower indication

Lunit SCOPE Business Model

# Business Model

Paired with pharma's drug, generating high sales by active testing before treatment



# Proven to Be Effective in Pharma Clinical Trials

+20 Global Big Pharma

Currently discussing research agreement/  
collaboration with leading global pharmas

## Monotherapy : 3x more responsive when using Lunit SCOPE IO

### Phase 1 : "multiple cancer", anti-PD-(L)1 Inhibitor

		Group	N	ORR
Pharma	Anti-PD-(L)1	All analyzed set	32	21.9%
	Lunit SCOPE IO*	Lunit SCOPE(+)	8 (25%)	<b>62.5%</b>
		Lunit SCOPE(-)	24 (75%)	8.3%

## Combotherapy : 2x more responsive when using Lunit SCOPE IO

### Phase 1/2 : Colorectal cancer (MSS), TGF-beta Inhibitor + anti-PD-(L)1 Inhibitor

		Group	N	ORR
Pharma	TGF-beta inhibitor	All analyzed set	31	12.9%
	Anti-PD-(L)1	Lunit SCOPE(+)	16 (51.6%)	<b>25.0%</b>
		Lunit SCOPE(-)	15 (48.4%)	0%

## Monotherapy : 2.6x more responsive when using Lunit SCOPE IO

### Phase 2 : Rectal cancer, Chemoradiotherapy + anti-PD-(L)1 Inhibitor

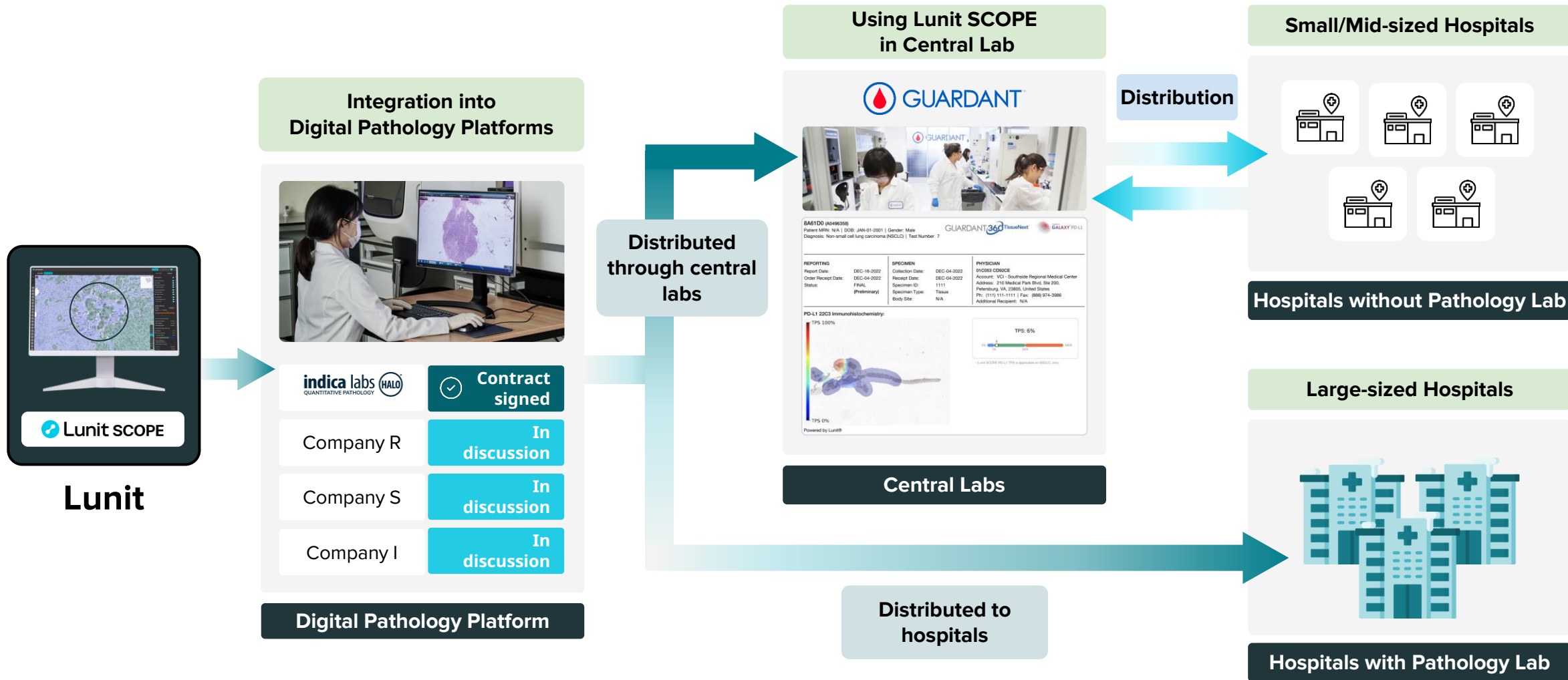
		Group	N	pCR
Pharma	Anti-PD-(L)1	All analyzed set	38	28.9%
	Lunit SCOPE IO*	Lunit SCOPE(+)	8 (21%)	<b>75.0%</b>
		Lunit SCOPE(-)	30 (79%)	16.7%

## Combotherapy : 1.6x higher PFS when using Lunit SCOPE IO

### Phase 2 : Nasopharyngeal cancer, Chemotherapy + anti-PD-(L)1 Inhibitor

		Group	N	PFS rate (%)
Pharma	Anti-PD-(L)1	All analyzed set	24	32.2%
	Chemotherapy	Lunit SCOPE(+)	12 (50%)	<b>52.1%</b>
		Lunit SCOPE(-)	12 (50%)	0%

# Lunit SCOPE Commercialization Strategy



# Commercialization Roadmap

2017 -

Product Development



Lunit SCOPE®

2021 -

Biopharma Collaboration

Paired as biomarker for new drug development clinical trials

2022 -

Early Revenue (RUO Sales) \$

Clinical collaborations with big pharma to generate research revenue

E.g.) Guardant Health

2019 Revenue \$214M  
100% RUO sales



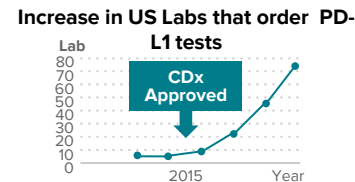
2020 FDA Approval

2025 -

FDA Approval \$\$\$



Exponential increase in revenue  
Approved as CDx product; authorized for reimbursement



CDx Approval Example PD-L1

Lunit SCOPE IO Market

\$27B market for cancer biomarkers

Target Market



4.8M

Immunotherapy Patients

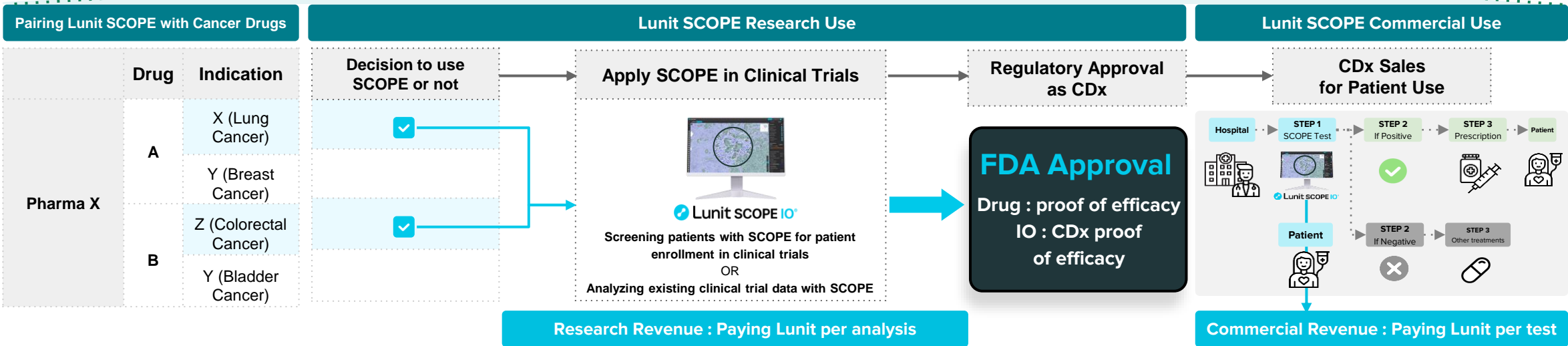
X



\$1,000~\$1,500

||

\$5 ~ \$7.5B



# AI-powered “Comprehensive Histophenomic Profiling”

**1940 -**

**1st Generation**  
Chemotherapy

**2000 -**

**2nd Generation**  
Targeted Therapy

**2015 -**

**3rd Generation**  
Immunotherapy

**2025 -**

**4th Generation**  
Antibody-drug Conjugate (ADC)

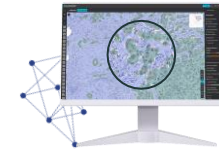
## CGP (Comprehensive Genomic Profiling)



- Comprehensive NGS-based biomarker panel mainly focusing on targeted therapy
- Accurate but slow (2~3 weeks)

Test Result	Matched Drug
EGFR mutation	Tagrisso, Iressa, ..
HER2 (ERBB2) amplification or overexpression	Enhertu, Perjeta, Herceptin, ...
BRCA1/2 mutation	Lynparza, Nerlynx, Rubraca, Talzenna, ...
ALK fusion	Alecensa, Zykadia, Alunbrig, Xalkori, ...
KRAS mutation	Lumakras, Krazati, ...
ROS1 fusion	Rozlytrek, Xalkori, ...
MET exon-skipping	Tabrecta, Tepmetko, ...
NTRK fusion	Vitrakvi, Rozlytrek, ...
FGFR2 fusion	Lytgobi, Truseltiq, ...
RET fusion	Retevmo, ...
⋮	⋮

## CHP (Comprehensive Histophenomic Profiling)



- Comprehensive tissue-based biomarker panel → Lunit's new approach
- Comprehensive and fast (<3 days)

Test Result	Matched Drug (example)
Lunit SCOPE IO (Inflamed)	anti-PD-(L)1 +/- anti-CTLA4
Lunit SCOPE PD-L1 (Inflamed)	anti-PD-(L)1 +/- anti-CTLA4
Lunit SCOPE IO (Immune-Excluded, Fibroblast)	anti-PD-(L)1 + anti-TGFB anti-PD-(L)1 + IL7-agonist Chemotherapy + IL7-agonist
Lunit SCOPE IO (Macrophage)	anti-PD-(L)1 + Macrophage-modulators
Lunit SCOPE IO (Blood Vessel)	anti-PD-(L)1 + anti-VEGF
Lunit SCOPE HER2	anti-HER2 ADCs
Lunit SCOPE uIHC - TROP2	anti-TROP2 ADC
Lunit SCOPE uIHC - ROR1	anti-ROR1 ADCs
Lunit SCOPE uIHC - PSMA	PSMA-targeted PET
Lunit SCOPE uIHC	Novel Target ADCs
⋮	⋮

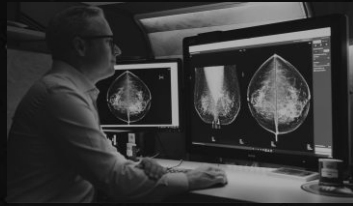
**Lunit SCOPE will become a widely used biomarker panel for immunotherapy and ADCs**

# Our Future

2023 INVESTOR RELATIONS



# Our Direction



AI Application Developer

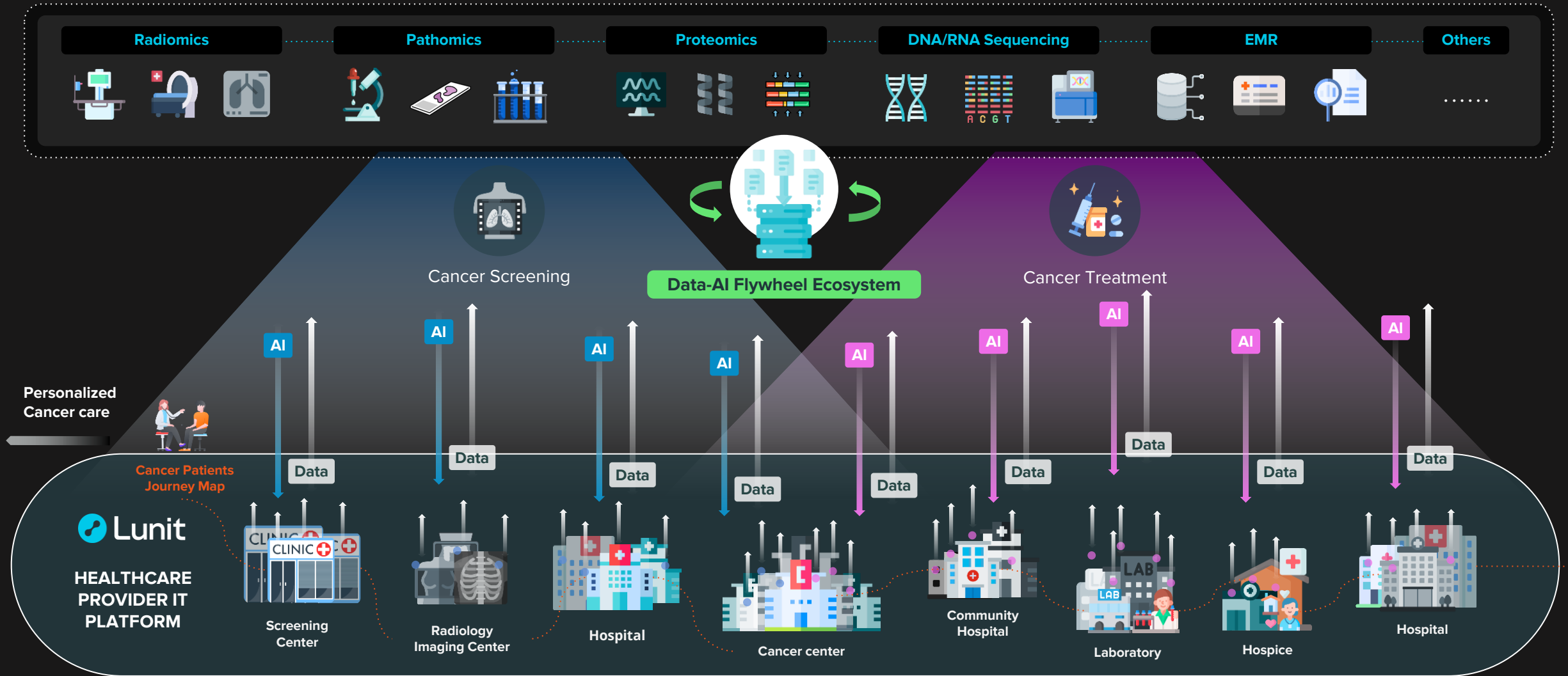


AI Application Developer  
+  
AI Platform Developer



# Lunit's 10-year Master Plan

Lunit's Cancer AI-Data Platform | Federated Learning Scalable Multiomics AI Platform



# Why Platform Approach?



## Data, Data, Data

- Only way for scalable data procurement and permanently gain competitive advantage
- Easy customer data access required for customization (few-shot learning)



## Maximize value to patients

- Comprehensive multi-omics approach requires platform integration → Outcome
- Cost efficiency through economies of scale
- Access & Continuity of care



## Independence from partners for distribution (esp. major markets)

- Partners are often narrow-minded in trying to mainly sell their own hardware/software
- This poses a major risk long-term, although valuable in the short-term



## Maximize revenue through direct and indirect value creation

- Going beyond revenue generation through AI product sales
- Platform approach significantly increases our total addressable market size

# Cancer Screening

## Autonomous AI - CAD

State-of-the-art AI → Autonomous AI

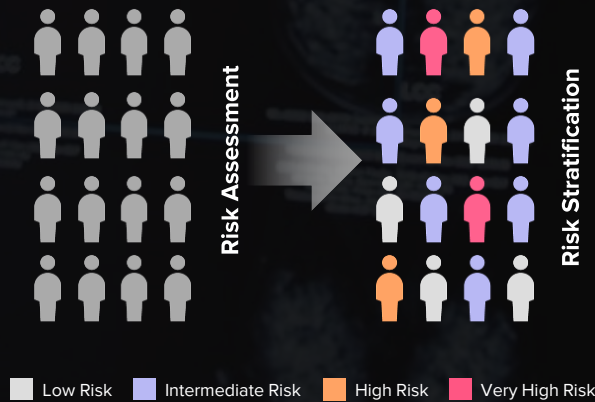
- Our AI products will soon reach very high accuracy level, close to 100%
- It will be cost-efficient and effective to let AI run autonomously on routine cancer screening imaging tests



## AI-Powered Risk Assessment

Personalized Cancer Screening

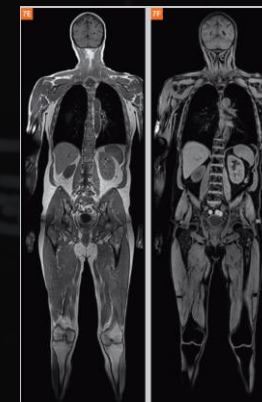
- AI can accurately predict future incidence of cancer incidence
- Risk stratification will enable more effective and cost-efficient cancer screening



## Whole-body MRI AI

Pan-cancer Coverage Key

- Rather than going organ by organ, which leads to high costs
- One imaging to cover all cancer types will enable effective and cost-efficient pan-cancer screening



**MRI of the Whole Body**

**“Game Changer of Cancer Screening”**

# Oncology

## Cover All Types of Drugs

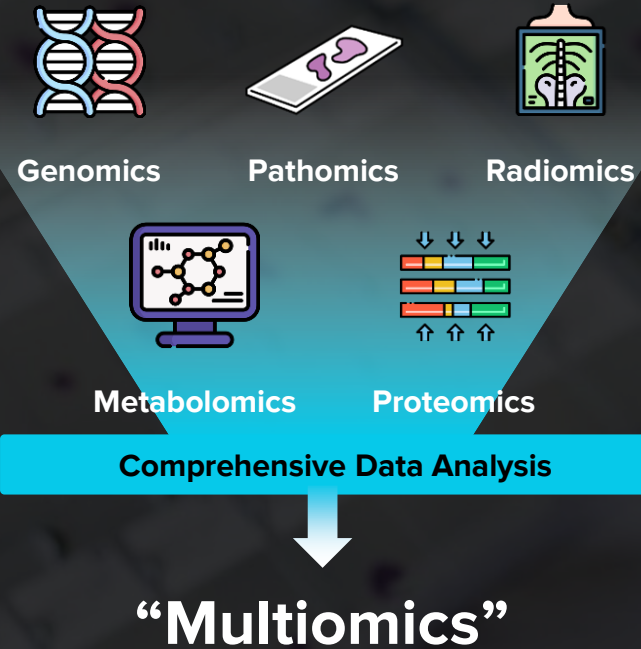
Lunit SCOPE will be able to cover all types of oncology drugs



Source : Maximize market research PVT. LTD

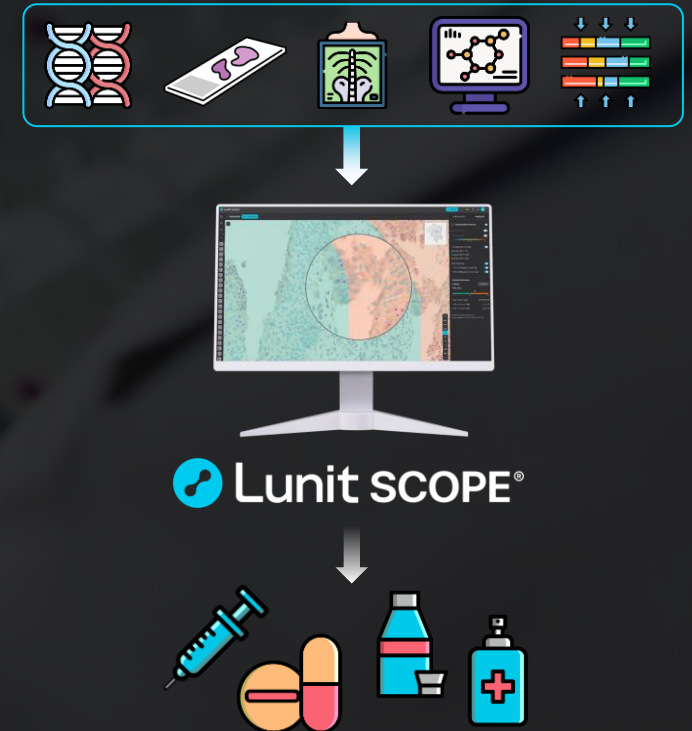
## Multiomic Biomarkers

Lunit SCOPE will deliver optimal cancer treatment through multiomics analysis



## Drug Discovery & Development

Lunit SCOPE biomarkers shall be applied to drug discovery/development



# Conquer Cancer through AI-powered Precision Medicine

Having strong faith that a data-driven approach is the future,

**Lunit will be the center of cancer care  
Globally become the new standard of care**



**THANK YOU**

## Appendix

# Consolidated Financial Statements

## Statement of Financial Position

Unit:KRW million

	2023.3Q	2022	2021	2020
Current Asset	46,106	68,050	89,619	22,018
Non Current Asset	29,836	29,103	4,230	3,106
<b>Total Assets</b>	<b>75,941</b>	<b>97,153</b>	<b>93,849</b>	<b>25,124</b>
Current Liabilities	7,713	9,446	87,626	153,251
Non Current Liabilities	19,758	18,797	4,185	2,511
<b>Total Liabilities</b>	<b>27,471</b>	<b>28,243</b>	<b>91,811</b>	<b>155,762</b>
Capital Stock	6,191	6,114	4,635	401
Additional paid-in Capital	323,928	320,856	216,650	14,168
Others	366	142	5	-2
Deficit	-282,014	-258,202	-219,253	-145,206
<b>Total shareholders' equity</b>	<b>48,471</b>	<b>68,910</b>	<b>2,038</b>	<b>-130,638</b>

Source: DART, Company K-IFRS Audited

## Income Statement

Unit:KRW million

	2023.3Q	2022	2021	2020
Operating Income	19,683	13,866	6,639	1,430
Operating Cost	44,144	64,517	52,339	22,381
<b>Operating Loss</b>	<b>24,461</b>	<b>50,651</b>	<b>45,700</b>	<b>20,951</b>
Financial Loss	2,743	13,642	563	276
<b>Financial Income</b>	<b>2,090</b>	<b>2,060</b>	<b>28,909</b>	<b>63,275</b>
Other Income	66	43	461	245
Other Expenses	69	92	91	35
<b>Income before Tax</b>	<b>23,811</b>	<b>39,118</b>	<b>73,676</b>	<b>83,739</b>
Income Tax	-	-	-	-
<b>Net Income</b>	<b>23,811</b>	<b>39,118</b>	<b>73,676</b>	<b>83,739</b>

Source: DART, Company K-IFRS Audited