



# Medical Imaging AI

Revolutionizing

- cancer patient diagnosis, treatment and survival
- cancer drug development

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**MEDIAN TECHNOLOGIES**

TD COWEN 44TH HEALTH CARE CONFERENCE  
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MARCH 4-6, 2024



**ALMDT**  
EURONEXT  
GROWTH



Applying AI and computer vision, we help conquer cancer and other life-threatening diseases by extracting powerful clinical insights from medical images.

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#### Our people

260+ highly qualified professionals in the US, Europe and China, 25+ nationalities (As of Dec. 31, 2023).

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#### Our growth

Powered by proprietary AI, computer vision and signal processing technologies, strong KOL connections, and medical, scientific, technology partnerships.

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#### eyonis™

With **eyonis™**, our AI/ML tech-based suite of software as medical devices (SaMD), we help enable clinicians to diagnose patients earlier.

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#### Imaging Lab iCRO

Our **iCRO** imaging solutions and advanced **Imaging Lab** offer help our 80+ biopharma clients drive their oncology clinical studies toward successful approval, using AI-driven image insights.

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# Imaging AI for Cancer

# Imaging AI for Patient Care

Imaging AI for Patient Care is revolutionizing preventive care and will help eradicate cancer by:

- Fueling the emergence of early diagnosis,
- Allowing predictive and personalized treatment plans,
- Leading to better patient outcomes.

# AI in Drug Discovery & Development

Based on data-driven insights, AI technologies will enable personalized treatments for better outcome:

- By decreasing the number of compounds subsequently tested in pre-clinical and clinical studies (clinical trials),
- By enabling personalized treatments,
- By helping the biopharma industry control at best the drug development process, time and costs.



# The Global Cancer Burden

Imaging AI will have the biggest impact ever on cancer care

# Facts & Trends about Cancer

1

Financial burden of cancer in the US was \$210bn in 2020 and projected to exceed \$245bn by 2030 [1].

2

97% of cancer care money goes for treatment of sick patients vs 3% for preventive care.

3

Most Stage 1 cancer can be cured and can now be identified with Imaging AI.

4

The cost for bringing a cancer drug to market is \$2.7Bn [2] during 12 years. With AI it could be a fraction of the cost & time

5

The cost of developing a new AI based imaging diagnostic test for cancer is approx. \$40m.

6

Most cancer drugs could become curative through personalized treatments. Viral Therapy, vaccine & immune therapy

Sources:

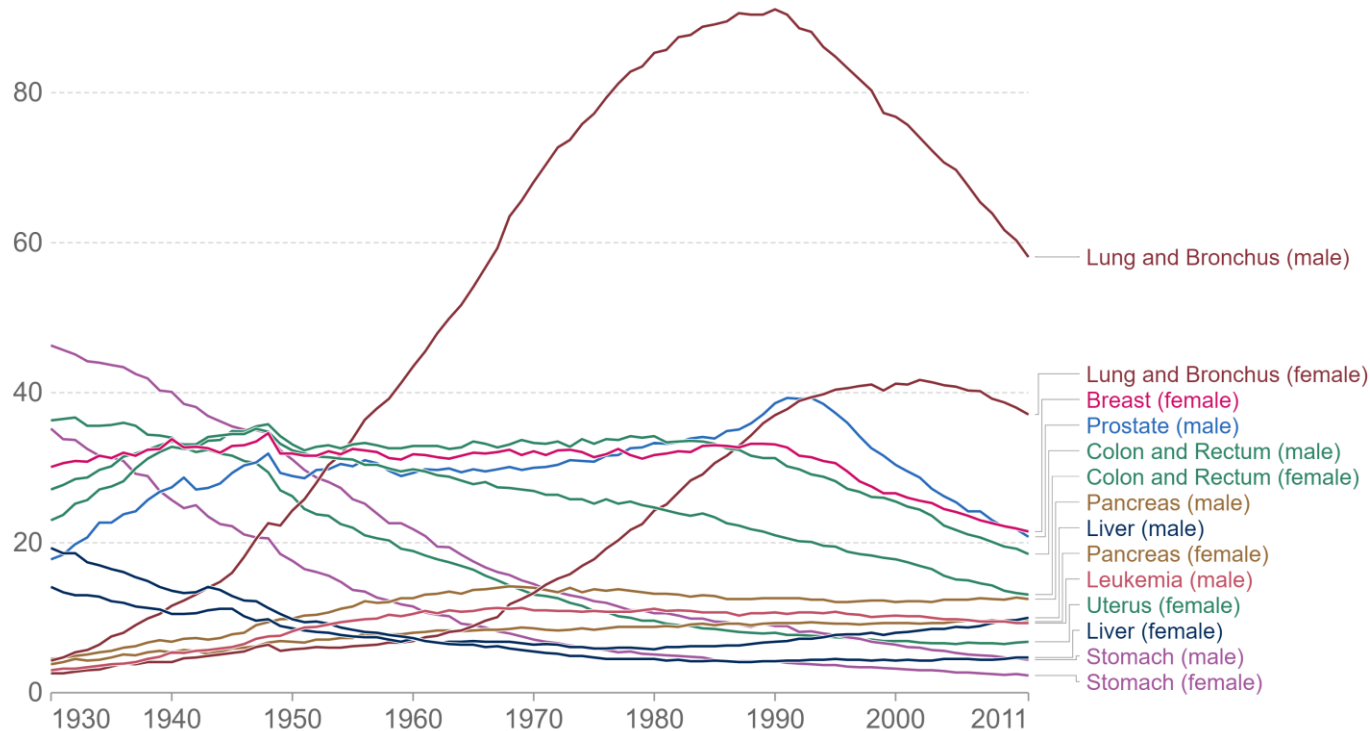
[1] American Association for Cancer Research

[2] Deloitte Report – January 2023

# US Cancer Death Rates Evolution over the Long-run

## Cancer death rates in the United States over the long-run

Age-standardized death rates from various forms of cancer in males and females, measured as the number of deaths per 100,000 individuals. Age-standardization is based on normalisation to the standard US population structure in the year 2000.



Source: American Cancer Society

OurWorldInData.org/cancer • CC BY

Early diagnosis and lifestyles changes have the biggest impact on cancer death rates:

- Lung and stomach cancer death rates decrease, driven by lifestyles changes.
- Prostate, colorectal and breast cancer rates decrease, driven by early diagnosis and screening programs.

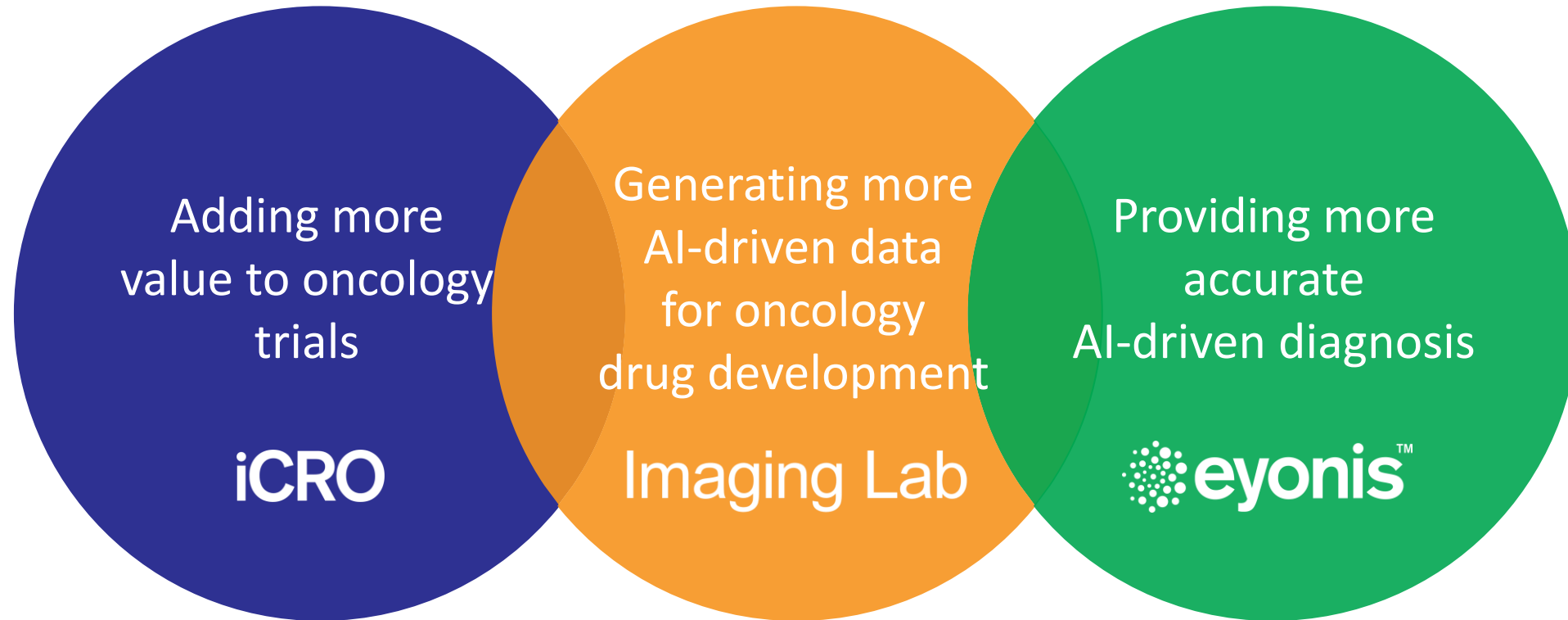


# AI Breakthroughs Applied to Medical Imaging Mark the Beginning of a New Era for Cancer Management

Applying AI and computer vision technologies help conquer cancer by extracting powerful clinical insights from medical images.



# Median Technologies Leverages AI Technologies to Bring More Value to Medical Images all along the Patient Journey



- Extract drug efficacy data
- Streamline the clinical process

- Select early-stage patient
- Discover predictive imaging biomarkers

- Develop noninvasive, early-stage diagnostic solutions
- Market SaMDs for routine clinical use
- Develop companion diagnostics

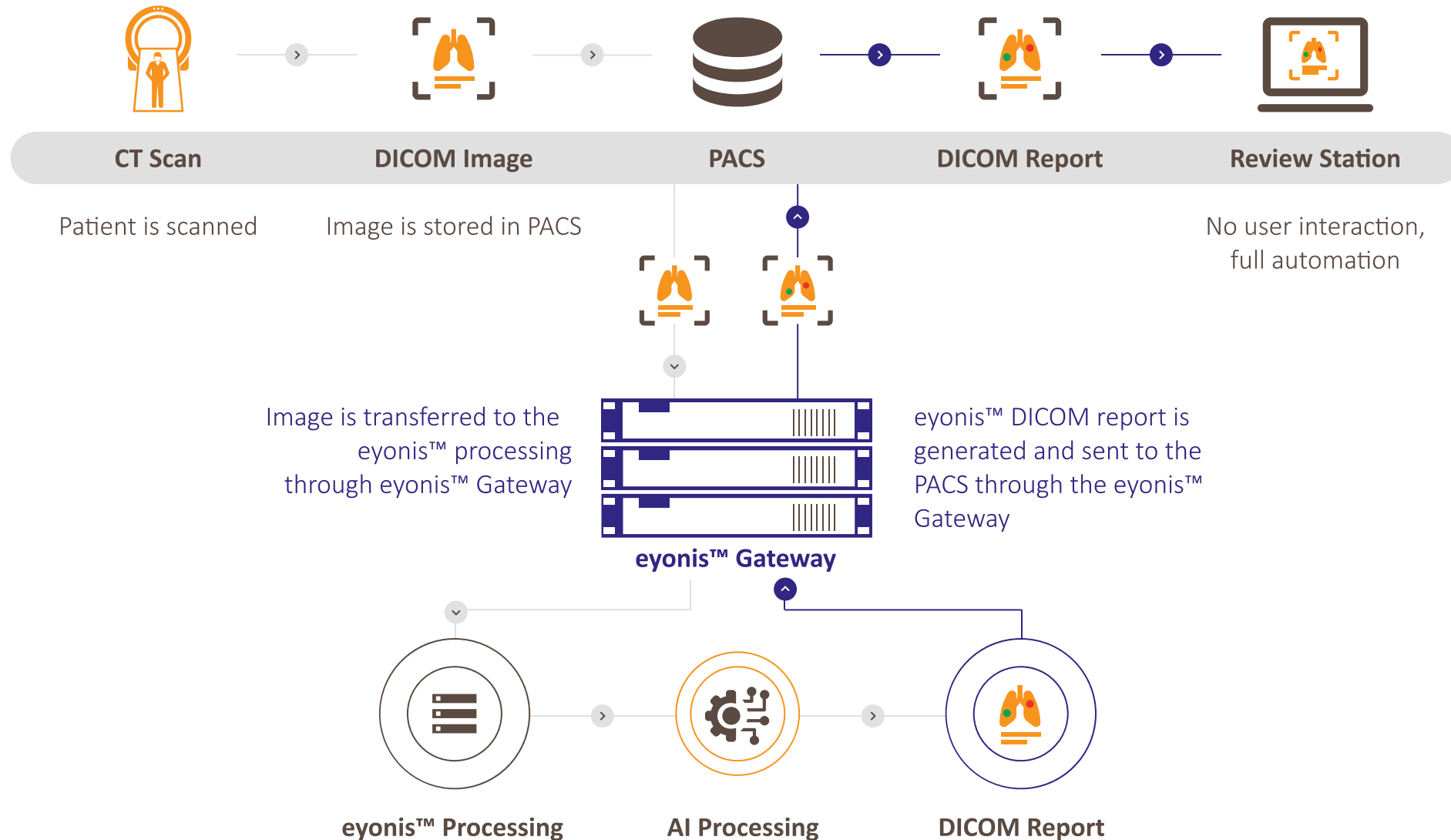
# eyonis™

## Shifting the Early Diagnostic Paradigm with Artificial Intelligence

We are developing the next generation AI/ML tech-based Software as Medical Devices (SaMD) to help detect, diagnose and monitor early-stage cancer patients.



# eyonis™ Integration in the Radiology Workflow



# Lung Cancer Screening

I-ELCAP study showed a 92% survival rate at 15y when diagnosed at stage 1 vs. 5% for stage 4 <sup>(1)</sup>  
Lack of diagnosis accuracy is a major hurdle to screening adherence & programs implementation

## Facts & Figures



### Lung Cancer

- 1st cancer killer worldwide - 18% of all 2020 cancer deaths, equal to colorectal & liver cancers combined <sup>(2)</sup>
- 1.8M deaths in 2020, 2.4M projected in 2030 <sup>(2)</sup>
- A new CPT reimbursement code of \$650 for quantitative CT tissue characterization in the US
- The Lung Cancer Screening TAM is \$10-20bn for the US & EU and could double with Asia
- Rising frequency among never-smokers, 20% in the US & UK <sup>(3)</sup>
- Only 870K screenings performed in the US in 2021 – 6% compliance <sup>(4)</sup>

## Target Population

LCS Programs		Target population
US	Implemented - USPSTF guidelines	14.5M (USPSTF)
Europe	Implemented in Croatia & Poland - Starting in UK - Developing in IT/FR/GE/SP/NL/SW	EU T5: 22M (Est.)
Asia	Implemented in SK nationally & China regionally - Japan/Taiwan study phase	ASIA T3: 100M (Est.)

Sources:

[1] [https://www.redjournal.org/article/S0360-3016\(19\)30110-5/fulltext](https://www.redjournal.org/article/S0360-3016(19)30110-5/fulltext)

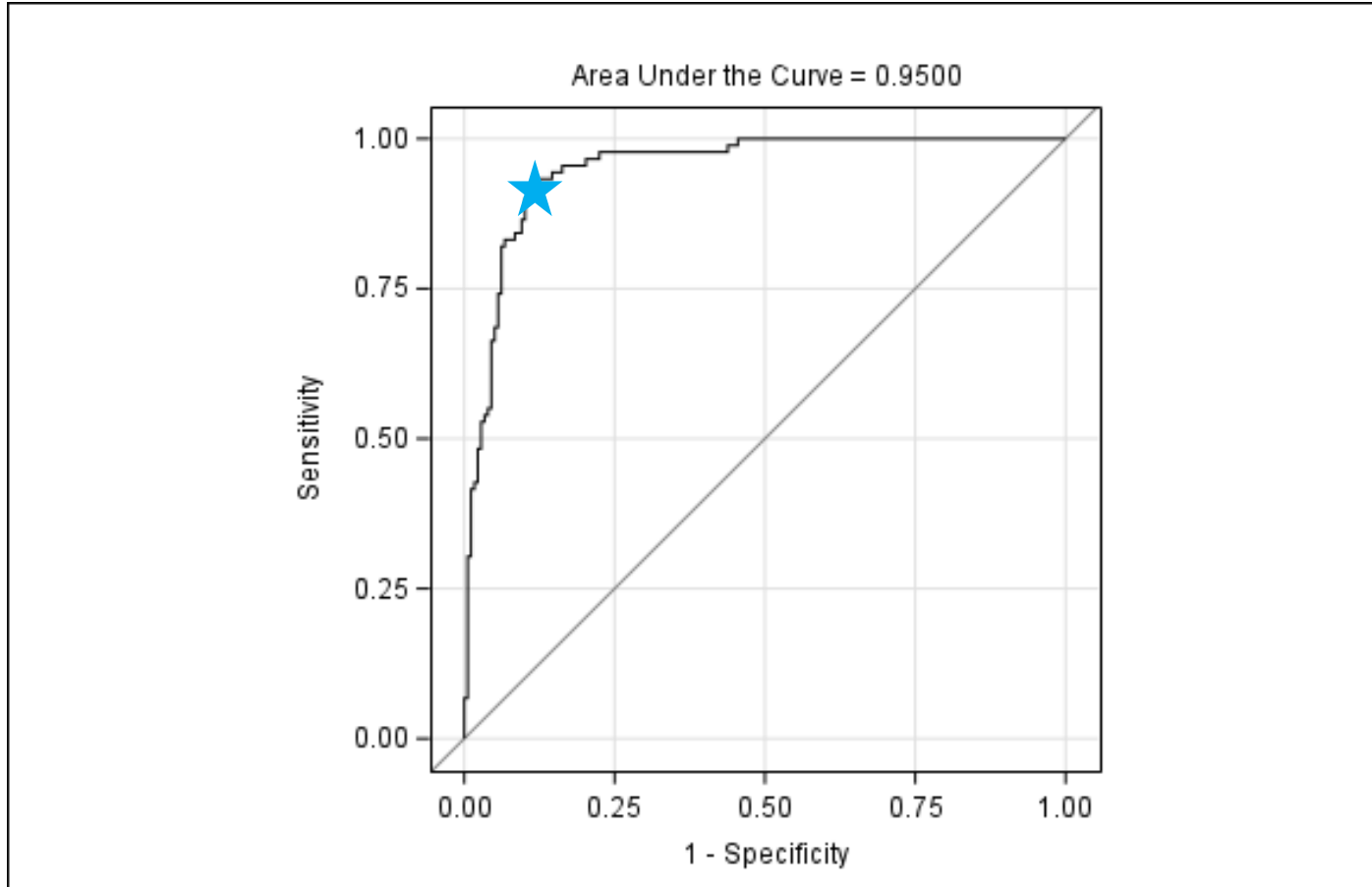
[2] Cancer Tomorrow, IARC, Global Cancer Observatory 2020 - WHO

[3] <https://www.lungambitionalliance.com/our-initiatives/lung-cancer-screening-the-cost-of-inaction.htm>

[4] <https://nrdrsupport.acr.org/support/solutions/articles/11000093991-lcsr-state-reports>

# eyonis™ Independent Verification Study

Results at patient level: primary endpoint to reach was  $AUC > 0.80$  – reached & exceeded



**89 Cancers / 178 Benign**

**Positive case = at least one finding  
above threshold.**

**AUC = 0.95 [0.918-0.982]**

**★ Max Youden Index**  
Sensitivity = 93.3%  
Specificity = 87.6%

**Strong Performance on an Independent Dataset**



## REALITY (Standalone Study MT-LCS-002)

- Up to 10 centers, 388 cancer, 608 benign (996 cases in total)
- Objectives:
  - › Assess device's standalone performance in characterizing positive and negative patients.
  - › Assess device's standalone performance in detecting and characterizing suspicious/malignant nodules

### Ground truth Generation

- › 2 + 1 truthers (regular truthers - experienced radiologists + adjudicator truthers - senior radiologists), w/ all clinical data
- › Assess lesions' location, segmentation, type, malignancy / benign status to establish "ground truth"

### LCS SaMD image analysis

- › End-to-end analysis by AI/ML tech based SaMD CADe/x
- › Detection, localization, segmentation & malignancy score
- › Generate a statistical report

### Statistical Analysis

- › Comparison of truthers ground truth VS. SaMD output

## "How good is eyonis™ LCS"

### Primary Endpoint

- AUROC that measures eyonis™ LCS performance on patient level data > 0.8

## RELIVE (Multi-Reader Multi-Case Trial MT-LCS-004)

- Pilot
  - 85 patients (30 cancer, 55 benign) and 4 readers
  - To justify pivotal sample size and reader training
- Pivotal
  - 360 patients (120 cancer, 240 benign) and 16 readers
  - Objectives:
    - › Demonstrate that eyonis™ improves clinician performance in analyzing LDCT lung screening scans, reducing FPs and unneeded follow-up procedures

### Control Arm



Reader

+



Annot Viewer

### Test Arm



Reader

+



Annot Viewer



eyonis™

### Statistical Analysis

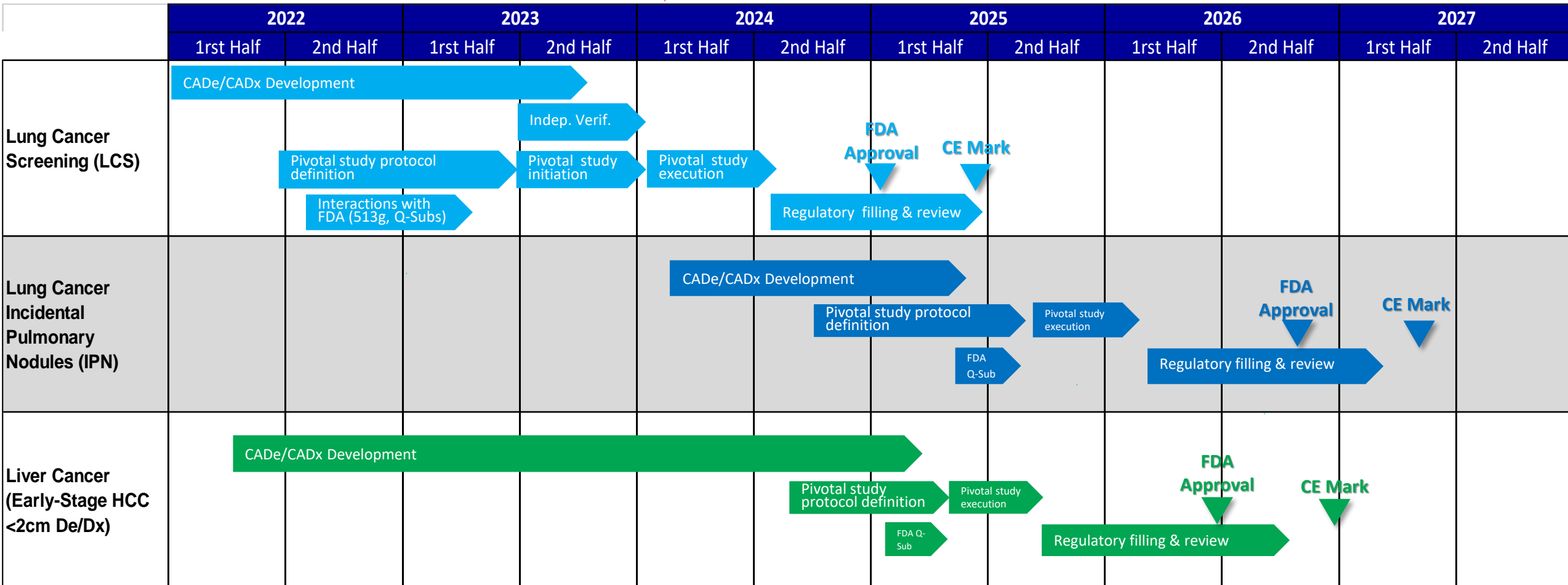
- › Compared reading with LCS report vs without

## "How much better is the clinician with eyonis™ LCS"

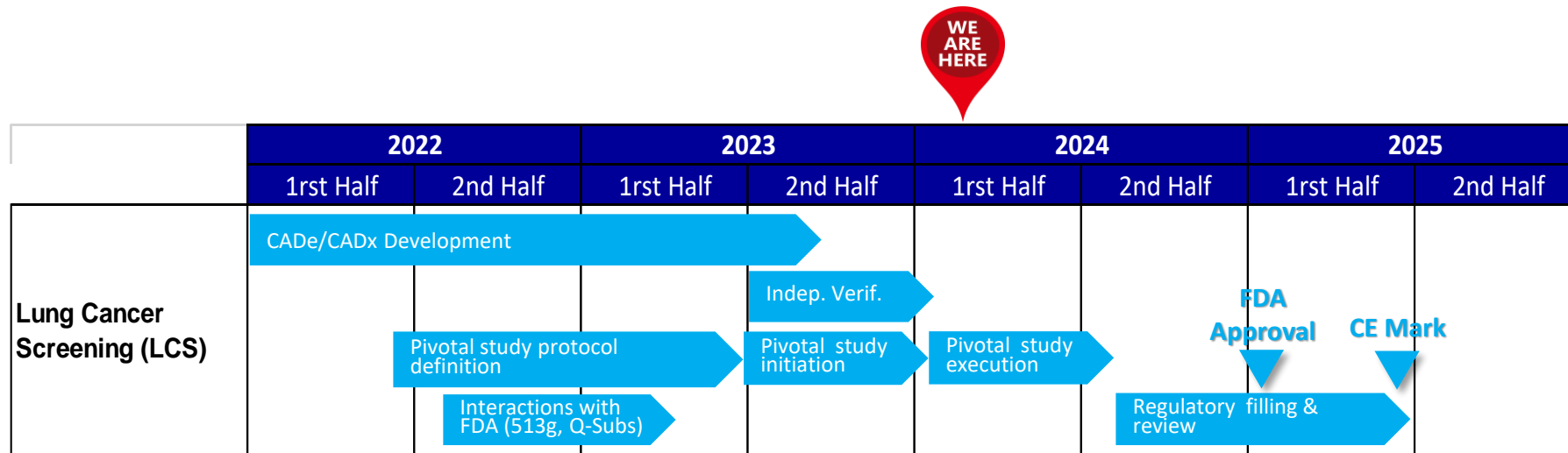
### Primary Endpoint

- Difference between with & without Median LCS in AUROC values that measures the modality performances on patient level data. Superiority with LCS report vs without to be achieved ( $\geq 3\%$ )

# Several Major Value Inflection Points Are Coming for eyonis™



# 2024 Key Milestones for eyonis™ LCS Clinical Plan



eyonis™ LCS Standalone Study  
(MT-LCS-002, REALITY)

Release of topline study  
results: Q2 2024

eyonis™ LCS Multi-Reader Multi-Case Study  
(MRMC, MT-LCS-004, RELIVE)

Release of topline study  
results : Q3 2024

CADe/CADx SaMD eyonis™ LCS filing (FDA 510(k))

Q4 2024, FDA 510(k) clearance  
expected Q1 2025

CADe/CADx SaMD eyonis™ LCS filing (CE mark)

Q4 2024, CE marking expected  
Q2 2025



- 1| Launch of Health economics studies, to support reimbursement code negotiation with payers: Q4 2024
- 2| eyonis™ LCS distribution partnerships in the US and Europe: Q4 2024
- 3| Strategic partnerships with big pharmas and global diagnostics companies
- 4| Sales and Marketing team ramp-up

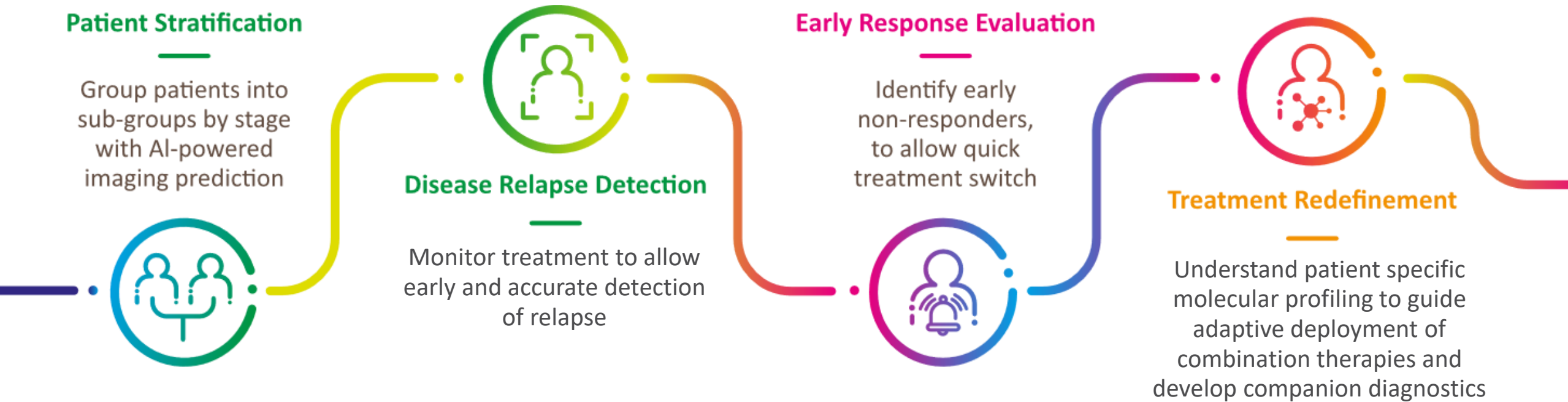
# iCRO

## Adding more value to oncology clinical trials & drug development programs

We provide our global biopharma customers with key data on patient response from phases I to III.

With our Imaging Lab services, we drive drug development success with transformative AI insights.

# Median Intends to Capitalize on AI Penetration in Drug Development to Complete Value Enhancing Partnerships

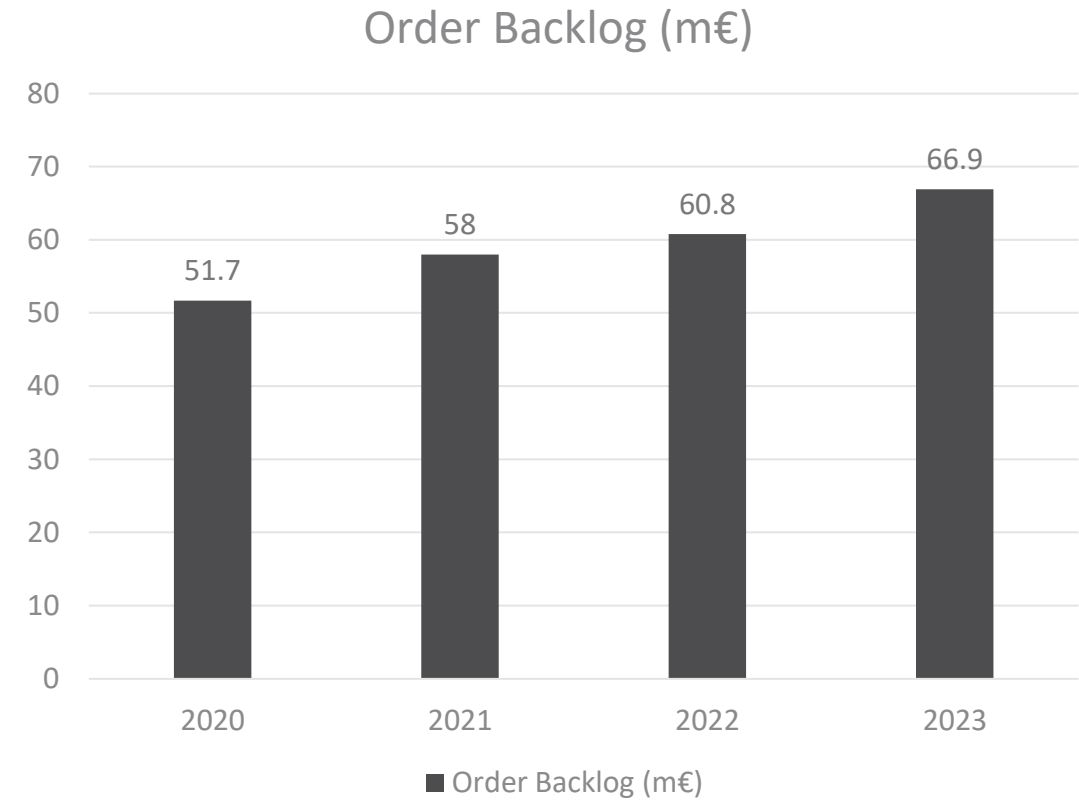
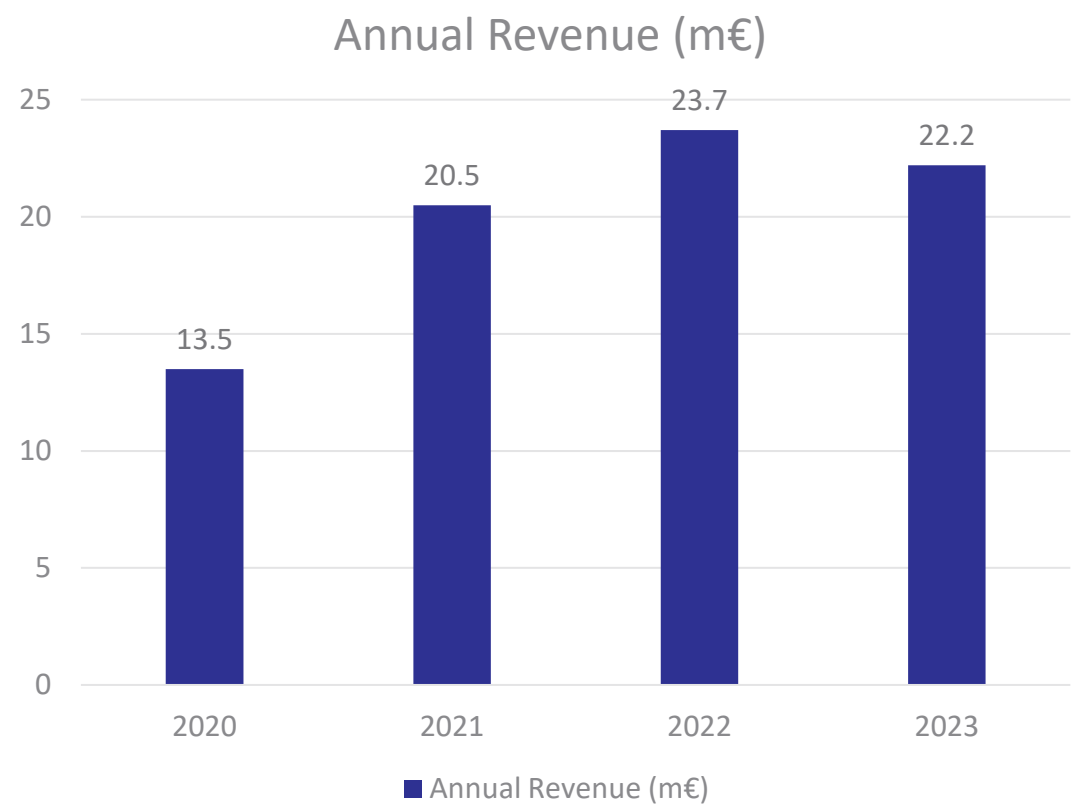




# iCRO Business Evolution



Evolution over the 2020-2023 period



- The oncology imaging CRO market is expected to grow at 12.5%/yr. for the coming 10 years
  - China is expected to have a stronger growth.
- Increase access to Requests-for-Proposal (RFP's):
  - Targeted effort at highest level to become preferred provider for Big Pharma with large clinical pipelines,
  - Targeted effort for tighter collaboration with CROs.
- Add value to the proposals through differentiated unique add-on offer powered with AI.

- 1| Scale up the iCRO core business, with double digit growth driven by US & EU business acceleration, and China steady recovery.
- 2| Gain in momentum from Imaging Lab, iCRO unique and highly differentiated AI-based Imaging offer:
  - Preferred provider qualification from Top Pharma Companies,
  - AI Collaboration agreements with Top Pharma Companies,
  - New partnerships with global CROs.

# Take-Away Messages

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# 2024 Topline Perspective for Future Growth

- Strategic AI partnerships with big pharma
- Penetrate several additional big pharma clients
- Complete eyonis™ LCS pivotal study and file 510(k) & CE Mark
- Launch of Health economics studies, to support reimbursement code negotiation with payers
- Strategic partnerships for eyonis™ LCS distribution





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## Our Core Values

### **Leading innovation with purpose**

Combine the spirit of innovation with our passion and conviction to help cure cancer and other debilitating diseases.

### **Committing to quality in all we do**

Be dedicated to quality in everything we do. Quality begins with us and we are committed to it.

### **Supporting our customers in achieving their goals**

Listen to the needs of our customers and help make their goals our goals through our innovation, imaging expertise, superior services, and quality solutions.

### **Putting the patient first**

There is a person at the other end of the images we analyze who is counting on us to do everything we can to help make them healthier.

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