



AI in Medical Imaging

Revolutionizing

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

MEDIAN TECHNOLOGIES

SEPTEMBER 2023



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.

Our people

230+ highly qualified professionals in the US, Europe and China, 25+ nationalities (As of Dec. 31, 2022).

Our growth

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

iBiopsy®

With **iBiopsy®**, our AI-powered imaging platform for the development of Software as Medical Device, we help enable clinicians to diagnose patients earlier. We intend to launch our **iBiopsy®** Lung Cancer Screening SaMD in the US in 2024.

iCRO Imaging Lab

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.

AI for Health

Artificial Intelligence for Health

AI for Health is already revolutionizing medical innovation, drastically changing the patient diagnosis, treatment, and outcome.

AI for Health addresses two main segments:

- Drug Discovery & Development,
- Patient Care.

AI in Drug Discovery & Development (1/3)

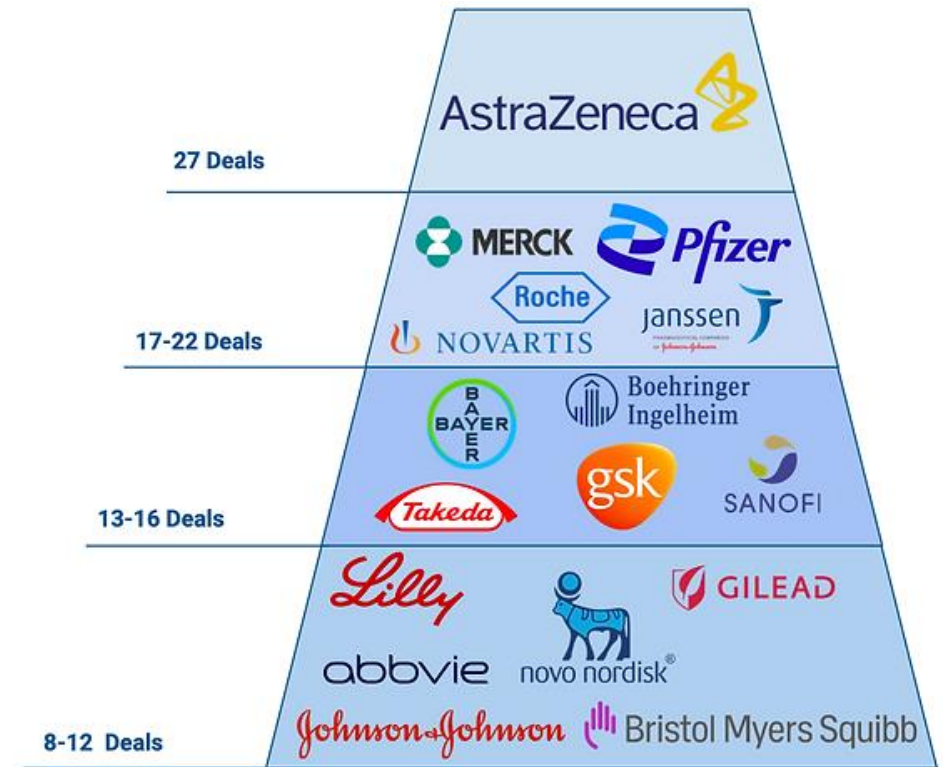
Based on data-driven insights, AI technologies can reduce the attrition rate and the R&D expenditure:

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

AI in Drug Discovery & Development (2/3)

Steady growth in the adoption of AI in drug development

- **Biotech companies** were AI technology early adopters. Adoption continues growing at a steady pace.
- New interest in AI is now coming from **big pharma**.
- **Cross-industry partnerships and transactions** between leading pharma organizations and AI-driven companies are increasing at a steady pace.
- According to Morgan Stanley, within a decade the pharmaceutical industry may be spending **\$50bn a year on AI** to speed up drug development.

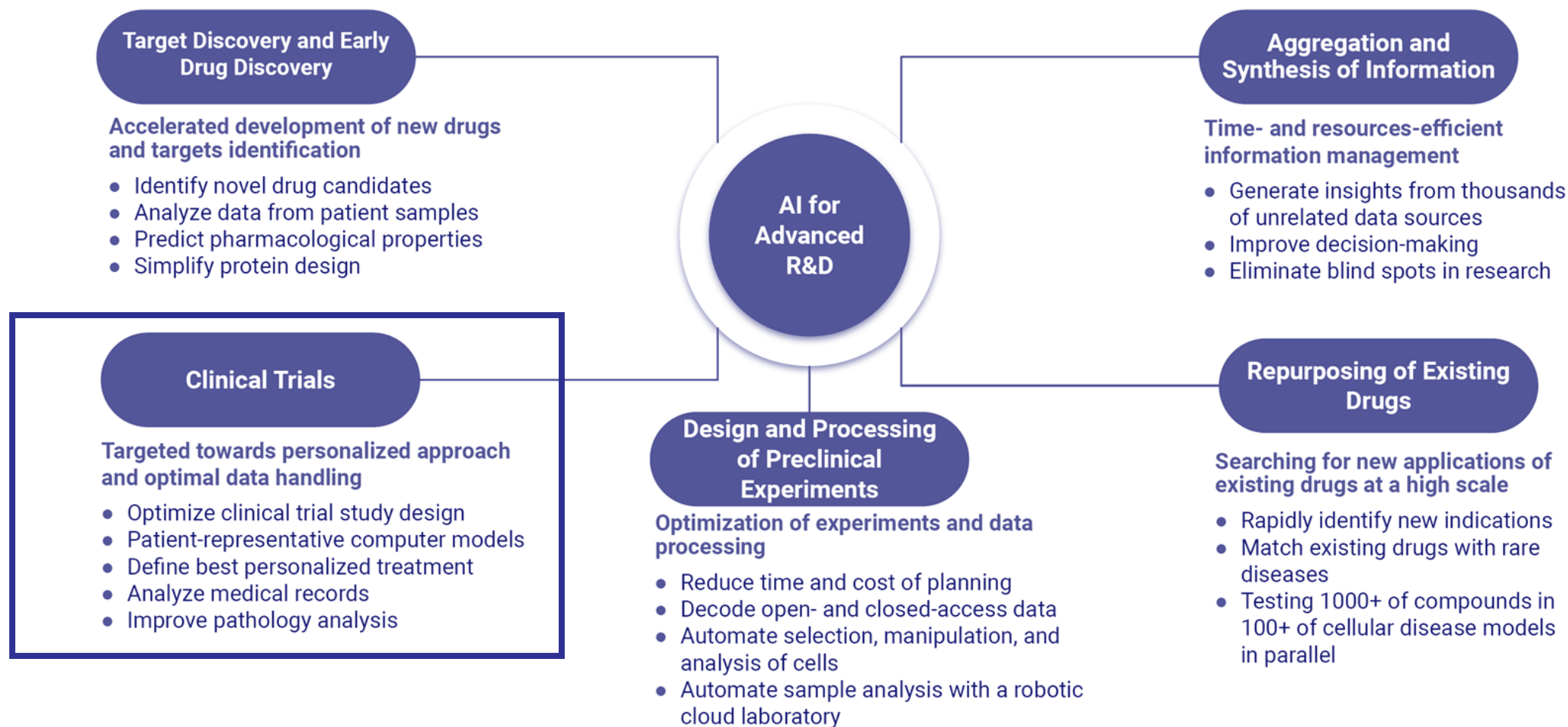


Leading pharma organization research deals with AI-driven companies (until Q1, 2023)

Source: Artificial intelligence for Drug Discovery – Landscape Overview Q1, 2023 – Deep Pharma Intelligence Report

AI in Drug Discovery & Development (3/3)

AI for advanced R&D: use cases



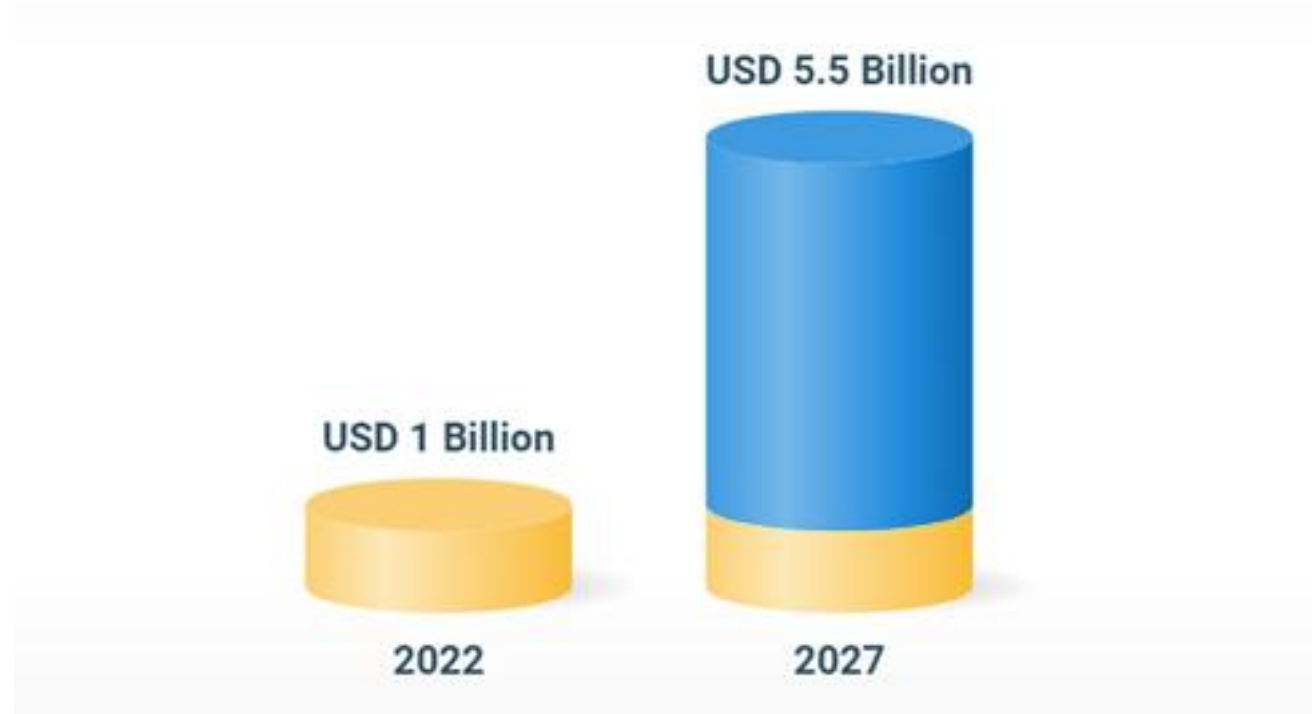
Source: Artificial intelligence for Drug Discovery – Landscape Overview Q1, 2022 –
Deep Pharma Intelligence Report

AI in Patient Care (1/3)

The deployment of AI in Patient Care is fueling the emergence of early diagnosis, predictive and personalized treatment plans, leading to better patient outcomes.

AI in Patient Care (2/3)

A fast-growing adoption of AI in medical diagnostics market

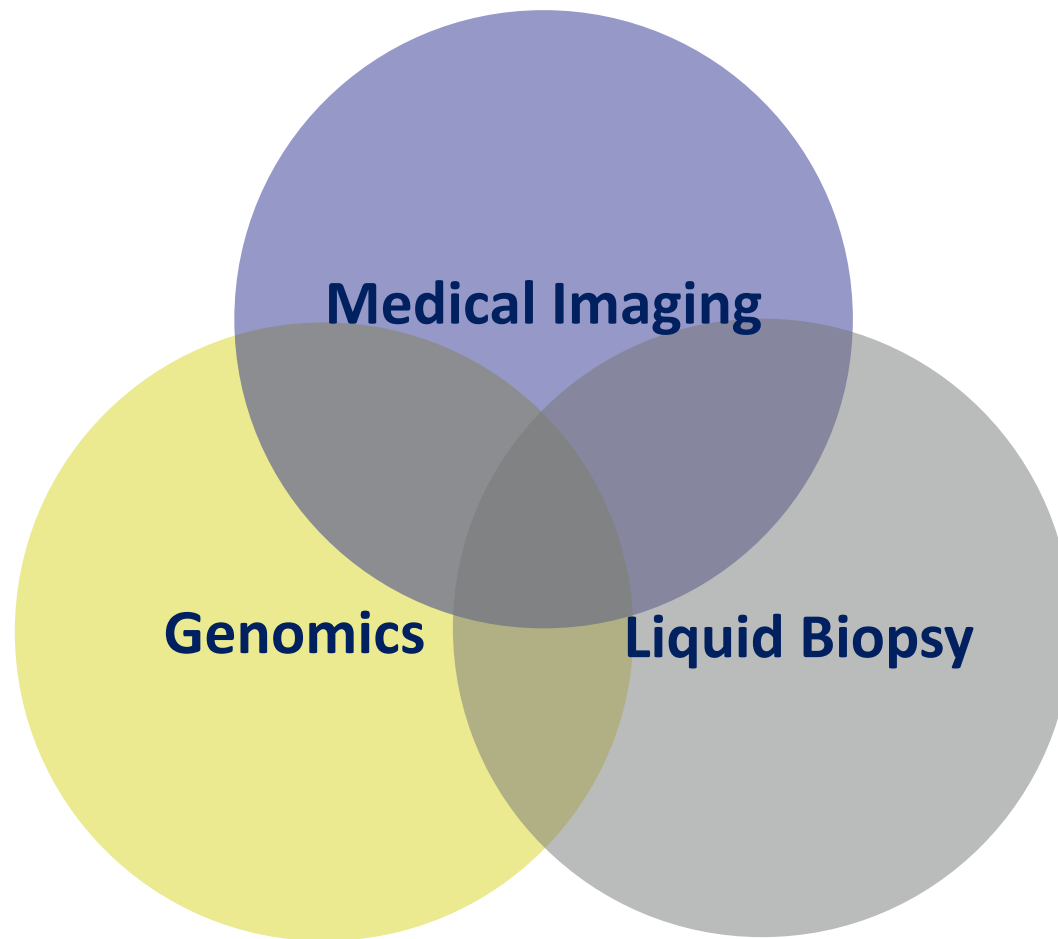


Global AI in Medical Diagnostics Market

Market forecast to grow at a CAGR of ~40%

Source: Research and Markets –AI In Medical Devices Global Market Report 2023

3 Major Application Segments for AI in Cancer Diagnostics



AI in Cancer Diagnostics

Medical imaging is the largest application segment benefiting from AI breakthrough, due to:

- the wide availability of imaging data,
- advancements in image recognition algorithms,
- the rising use of imaging in screening, diagnostics and monitoring of patients.

The Global Cancer Burden

How AI technologies can help

Facts about Cancer

1

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

2

In 2022, the median cost for bringing a new cancer drug to market was \$2.7Bn [2]. The average development time is 12 years.

3

Most cancer drugs are not curative, they contribute to extend patient lives.

4

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

5

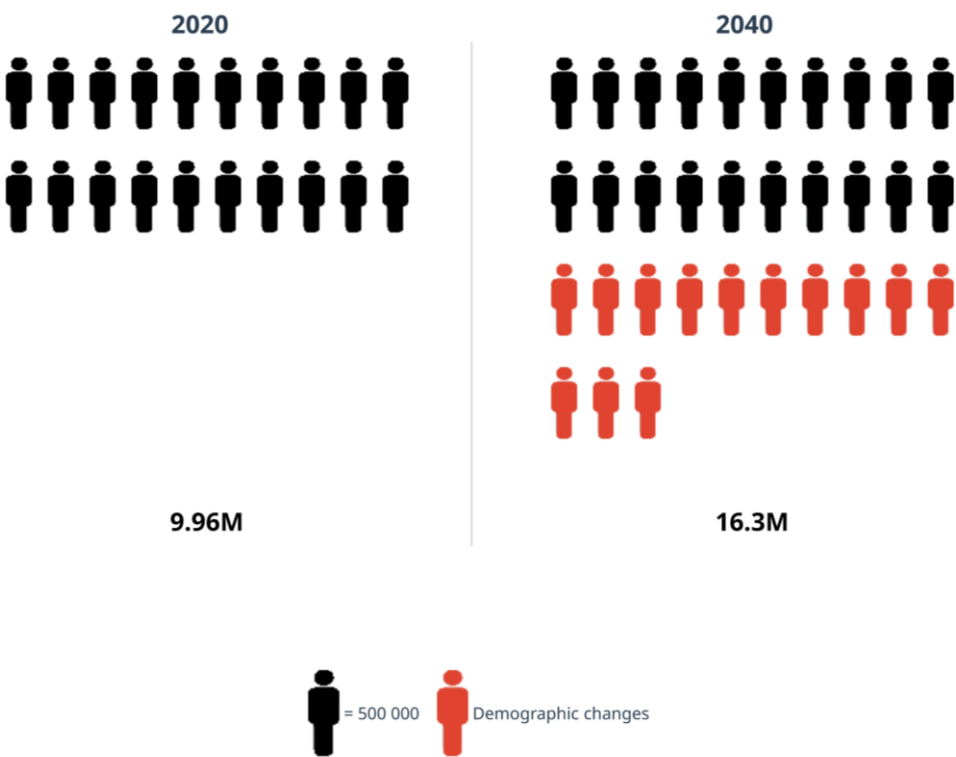
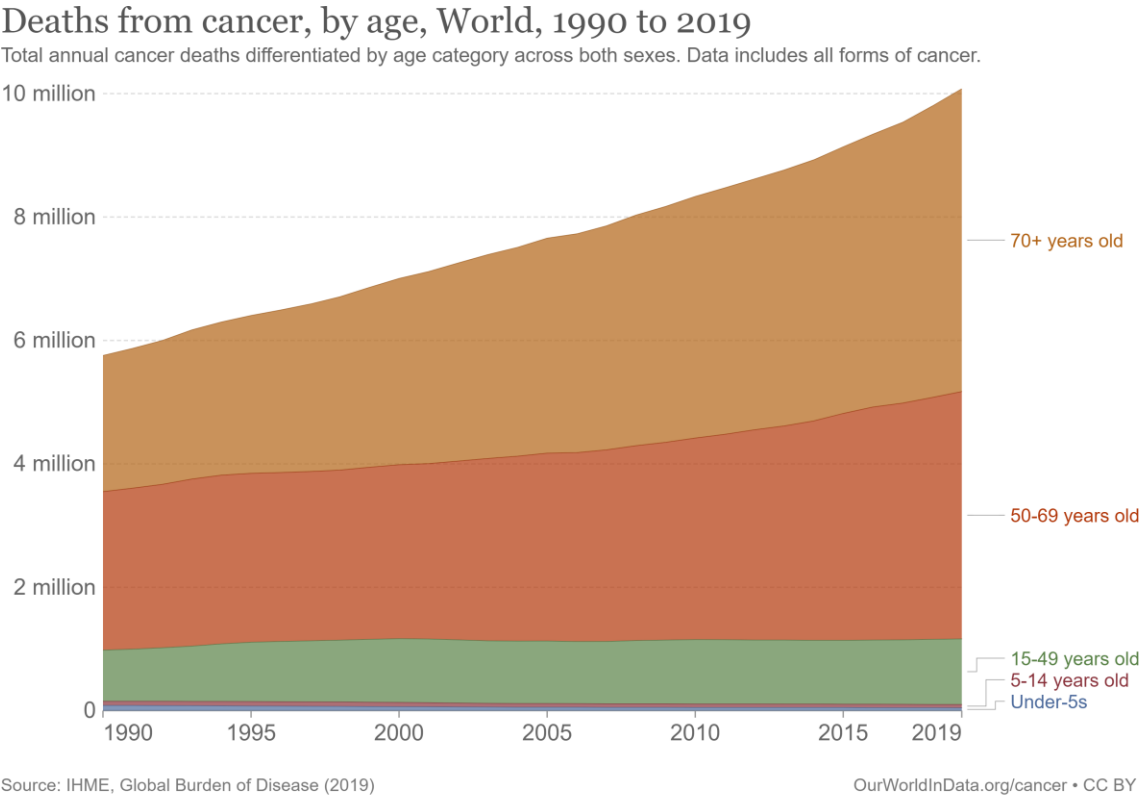
There is a direct correlation between the stage of the disease and the capacity to save a patient life. Stage 1 cancer can be cured.

6

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

The Global Cancer Burden

Cancer death number will continue to rise in the coming decades



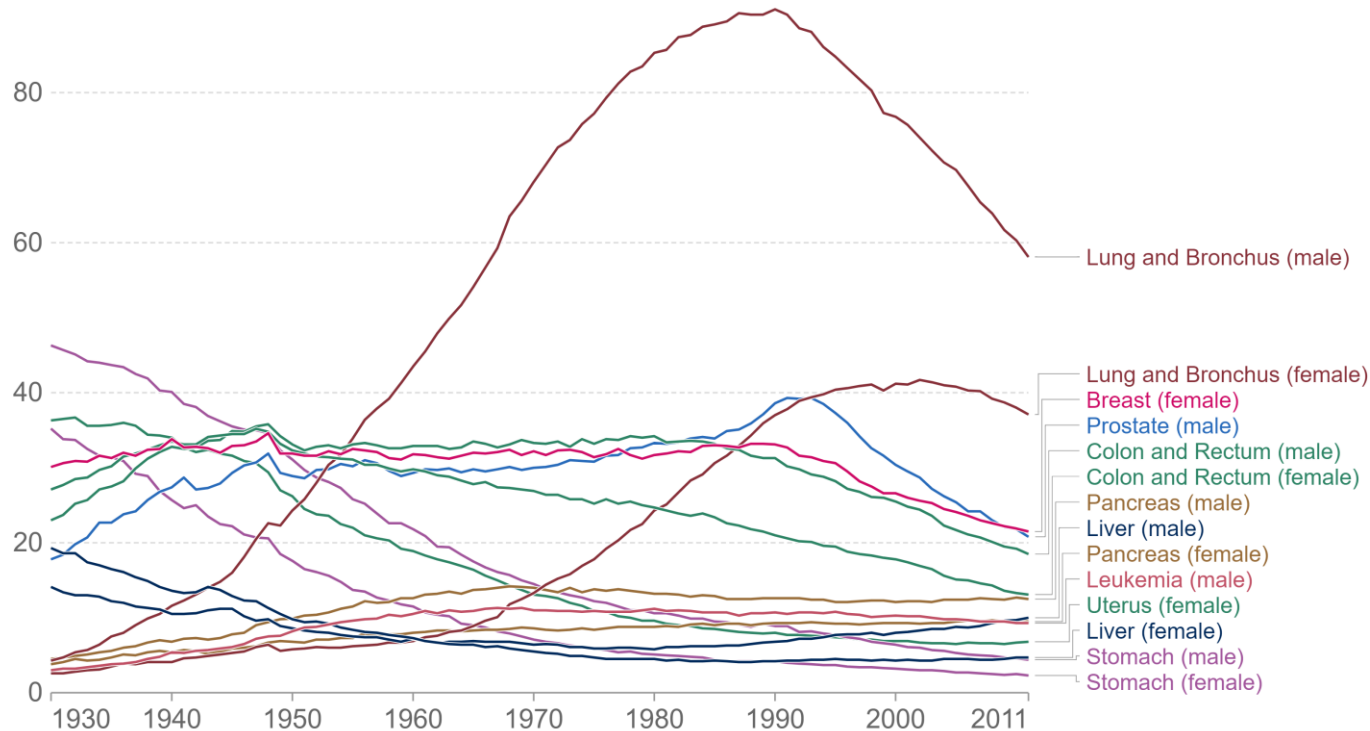
Estimated number of deaths from 2020 to 2040, Both sexes, ages [0-85+] – All cancers

Source: Cancer Tomorrow, IARC, Global Cancer Observatory 2020 - WHO

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:

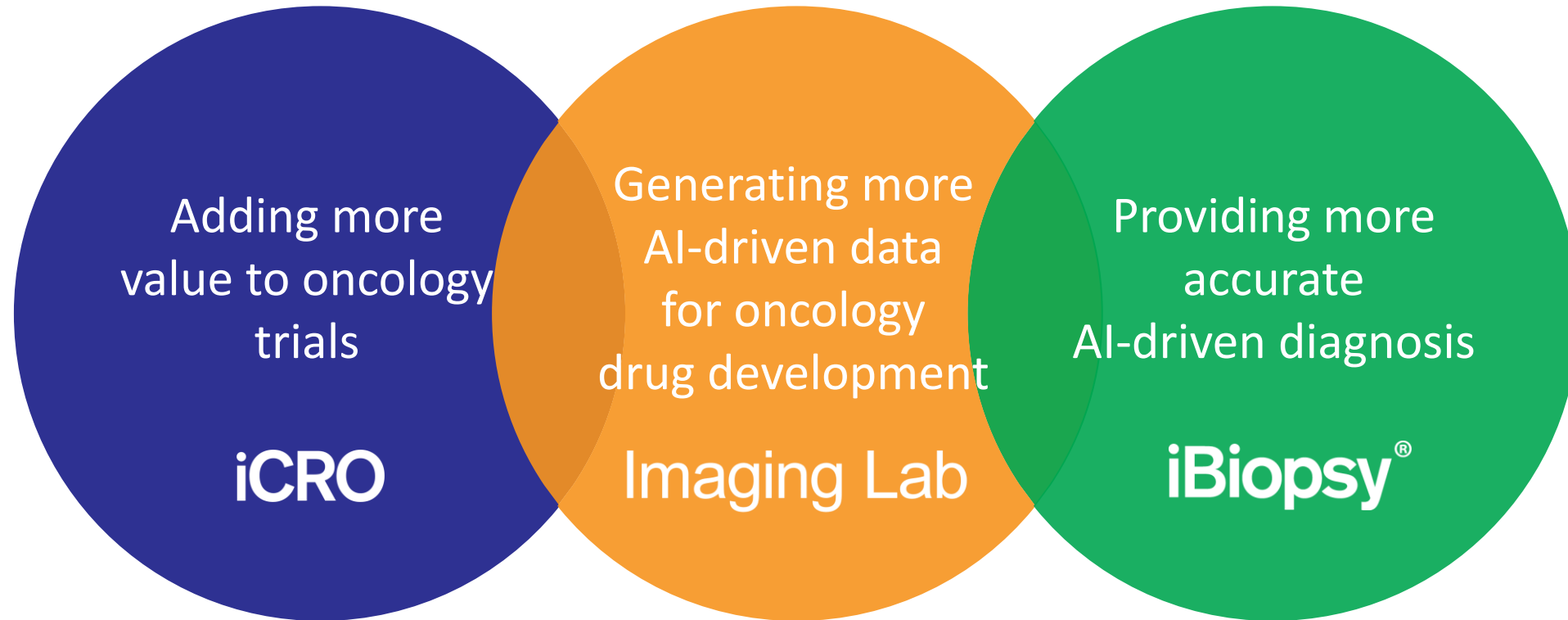
- Lung and stomach cancer death rates decrease driven by lifestyles changes,
- Prostate, colorectal and breast cancer rates decrease driven by early diagnosis and screening programs.

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 Technology 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

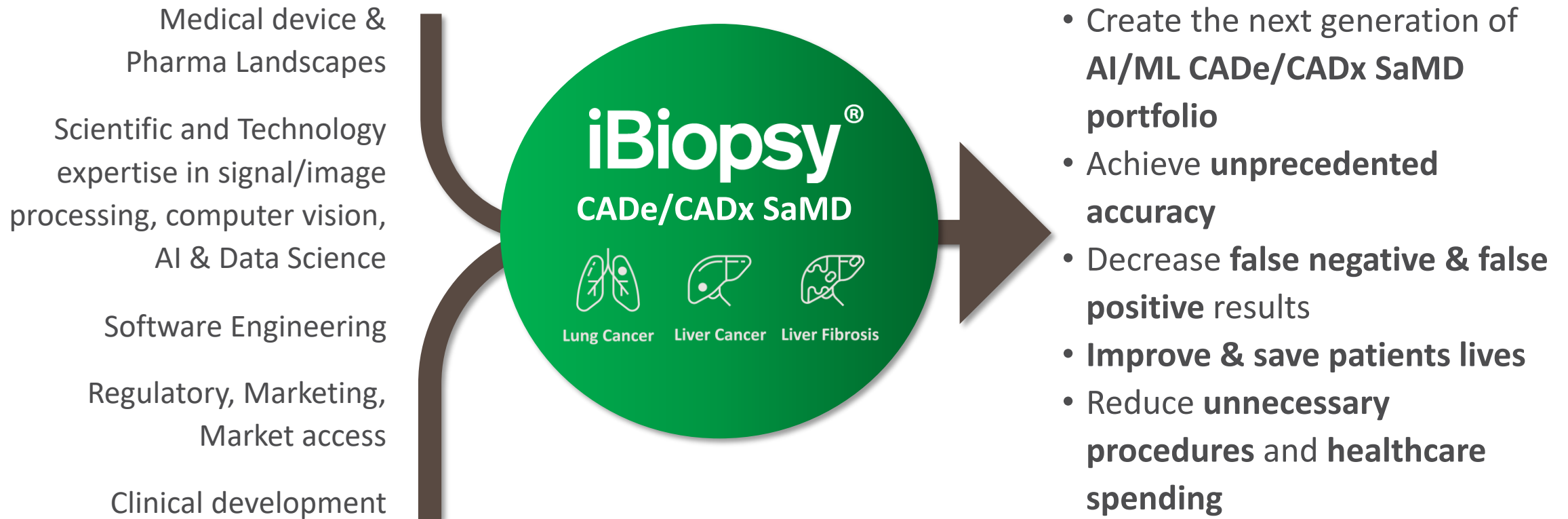
iBiopsy®

Shifting the Early Diagnostic Paradigm with Artificial Intelligence

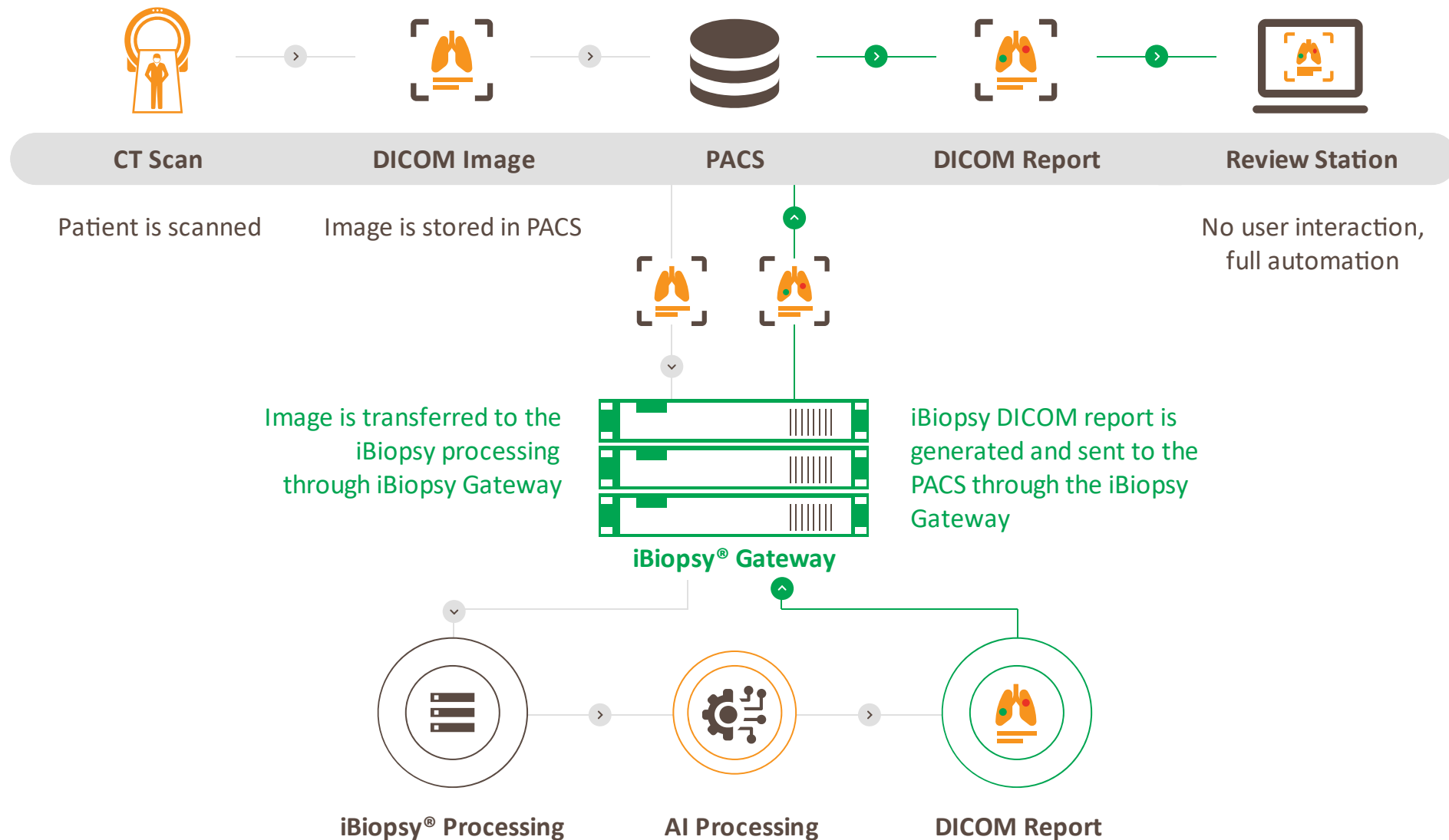
We are developing the next generation AI/ML tech-based Software as Medical Device (SaMD) to help:

- Detect, diagnose & monitor early-stage lung and liver cancer patients
- Detect, diagnose & monitor early-stage NAFLD/NASH patients

iBiopsy® leverages Median's expertise and capabilities to design the most advanced AI/ML tech-based CAdE/CADx SaMD



iBiopsy® 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 ⁽¹⁾
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 ⁽²⁾
- 1.8M deaths in 2020, 2.4M projected in 2030 ⁽²⁾
- 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 ⁽³⁾
- Only 870K screenings performed in the US in 2021 – 6% compliance ⁽⁴⁾

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

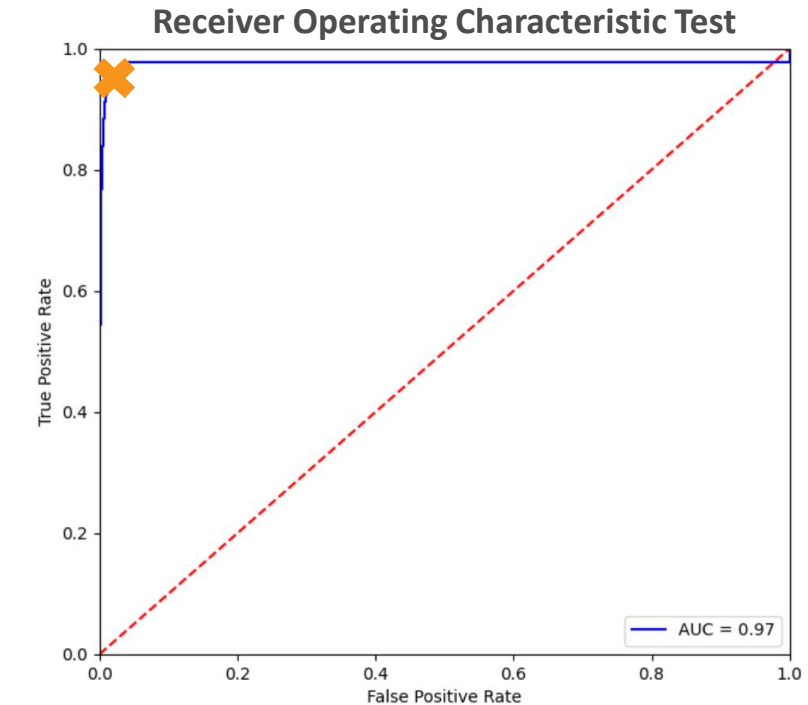
[3] <https://www.lungambitionalliance.com/our-initiatives/lung-cancer-screening-the-cost-of-inaction.htm>

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

Continuous Improvements of iBiopsy® Performance Results

LCS CAdE/CADx SaMD performance results

	March 2022	February 2023
Data source	NLST data	LIDC_IDRI and NLST data
Data set	Total Cohort: 1,760 patients (16,789 Nodules)	Total Cohort: 9,863 patients (195,943 nodules)
Results at nodule level	AUC = 0.976 Max Youden Index Operating Point: Sensitivity = 94.7% Specificity = 93.3%	AUC = 0.974 Max Youden Index Operating Point (✖): Sensitivity = 96.5% Specificity = 97.2%



Results presented at the European Congress
of Radiology, March 1-5, 2023
Vienna, Austria

A two-study approach

Standalone Performance Study (MT-LCS-002)

- 4-6 Centers, ≥294 cancer, ≥521 benign
- Objectives:
 - › Assess software's standalone performance in characterizing positive and negative patients.
 - › Assess system's standalone performance in detecting and characterizing malignant/suspicious nodules.

Cohort: 4-6 Centers in EU and the US
≥294 cancer, ≥521 benign

Reference Standard Generation

- › Radiologist Identified nodules: localization, segmentation, status (benign/malignant)

iBiopsy® Software Image Analysis

- › Automated analysis via AI CAdE/x
- Finding detection, localization segmentation and malignancy score.
Report suspicious/malignant findings.

Statistical Analysis

Compared AI output- report based on suspicious and malignant findings - to the Radiologist Reference Standard.

“How good is iBiopsy®”

Multi-Reader Multi-Case Study (MT-LCS-004)

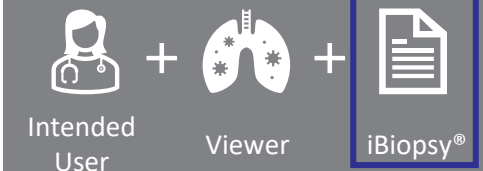
- 360 total patients, 4-6 centers: 120 cancer, 240 benign
- 16 readers analyze each case with and without iBiopsy® Software
- Objectives:
 - › Demonstrate that iBiopsy® improves clinician performance in analyzing LDCT lung screening scans, reducing FPs and unnecessary follow-up procedures.

360 Patients, 16 Readers

Control Arm



Test Arm



Statistical Analysis

Compare Readers performance in evaluating and managing the patient with vs without the iBiopsy® report support.

“How much better is the clinician with iBiopsy®”

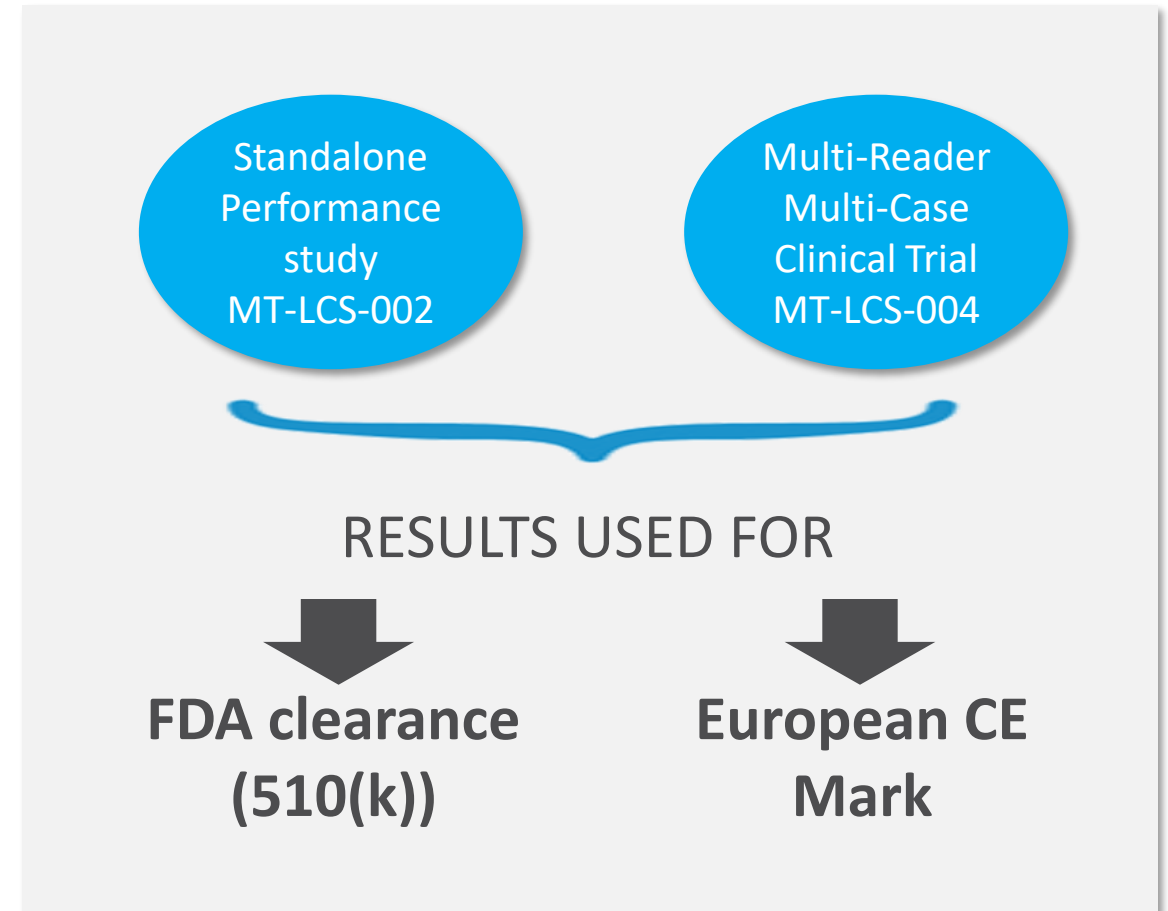
Academic sites involved in the pivotal validation plan

US-based academic clinical sites:

- The University of Texas MD Anderson Cancer Center, Houston, TX, USA,
- Hospital of the University of Pennsylvania (Penn Medicine), Philadelphia, PA, USA,
- Baptist Memorial Health Care and Baptist Clinical Research Institute, based in Memphis, TN, USA.

Europe-based academic clinical sites:

- Clínica Universidad de Navarra, Departments of Respiratory Medicine and Radiology, Pamplona and Madrid, Spain,
- Instituto de Investigación Sanitaria de la Fundación Jiménez Díaz (IIS-FJD), Madrid, Spain.



HCC Detection / Diagnosis

Unmet needs are primarily focused on the earlier stages of the patient journey
Current imaging diagnostics offer poor sensitivity for small liver lesions (≥ 1 cm)

Facts & Figures



Liver Cancer

- HCC accounts for 90% of all primary liver cancers ⁽¹⁾
- 3rd cause of cancer mortality worldwide, accounting for 8% of all cancer deaths in 2020 ⁽²⁾
- 830K deaths in 2020, 1.1M projected in 2030 ⁽²⁾
- 5-year survival rate 10-20%, 3% for distant tumors ⁽³⁾
- Risk factors: HBV, HCV, heavy alcohol use, cirrhosis, NAFLD, obesity, T2DM
- Surveillance rates range from 10 to 40% ⁽⁵⁾

Target Population

	HCC Surveillance Programs	Target population
US	AASLD guidelines for cirrhotic patients & other high-risk patients	US: 0.4M (Est.)
Europe	EASL guidelines for cirrhotic & other high-risk patients	EU T5: 1M (Est.)
Asia	APASL guidelines for cirrhotic & & other high-risk patients	ASIA T3: 7.5M (Est.)

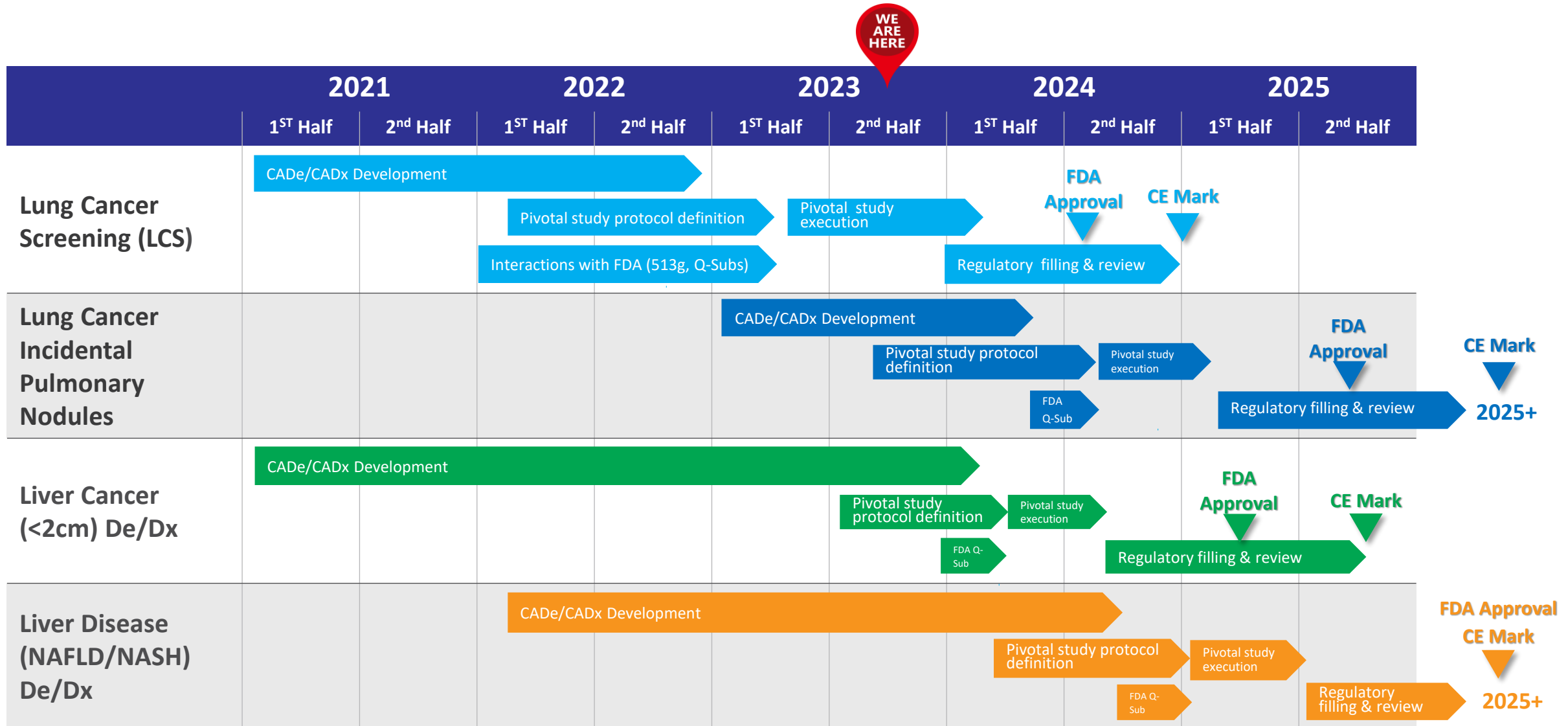
Sources: [1] <https://www.nature.com/articles/s41572-020-00240-3>

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

[3] <https://www.ajmc.com/view/humanistic-and-economic-burden-of-hepatocellular-carcinoma-systematic-literature-review>

[4] <https://pubmed.ncbi.nlm.nih.gov/27531119/>

Several Major Value Inflection Points Are Coming for iBiopsy®



- 1| Reimbursement codes and Health economics studies
- 2| Payer negotiation
- 3| Distribution partnerships in the US and Europe
- 4| Sales and Marketing team ramp-up

1

LCS SaMD pivotal clinical studies

2

LCS SaMD 510(k) filing with FDA

3

- **LCS SaMD Go to Market plans**
- **Reimbursement & HE studies**

4

Continue to develop strategic relationships with major LC clinical institutions & KOLs

5

Develop our own sales team, and partnership with major market players for distribution

6

Continued progress on IPN, HCC & NASH as per roadmap

iCRO

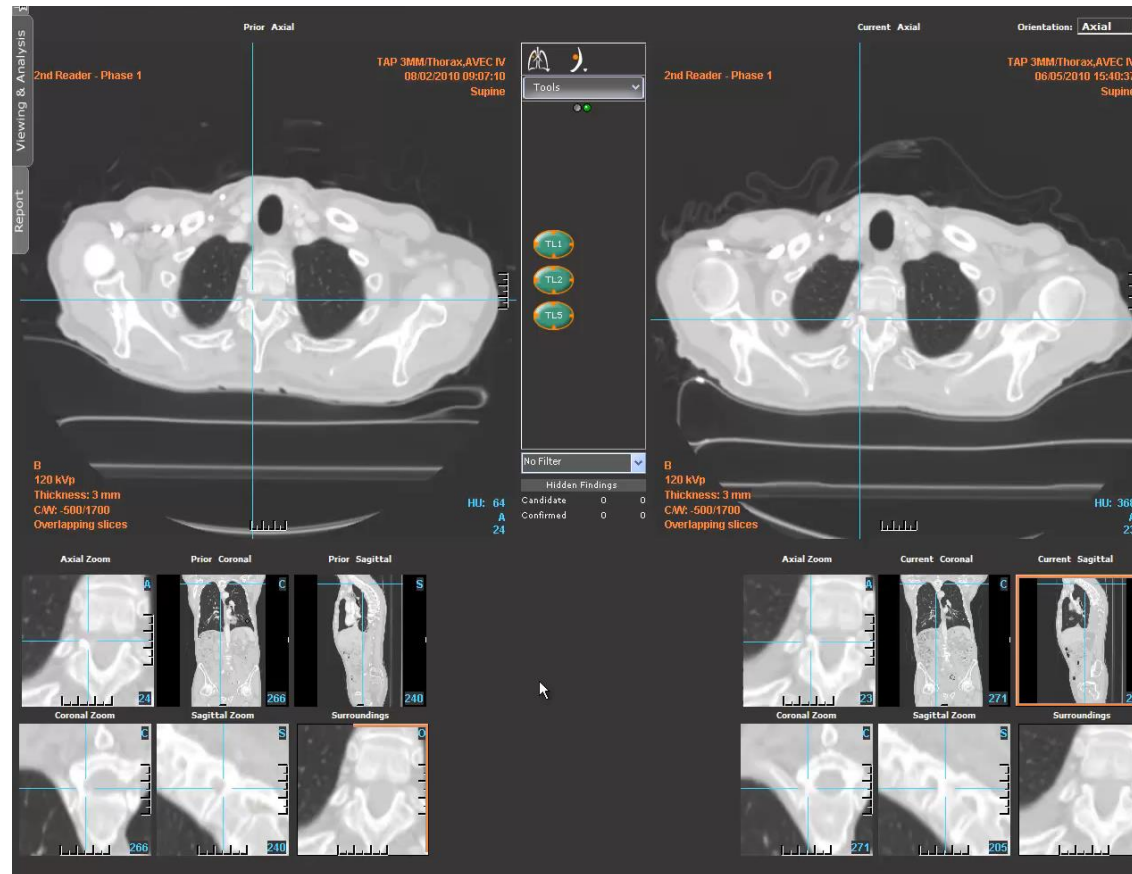
Adding more value to oncology clinical trials & drug development programs

We provide our global biopharma customers:

- With key data on patient response from phases I to III,
- With Imaging Lab services, driving drug development success with transformative AI insights.

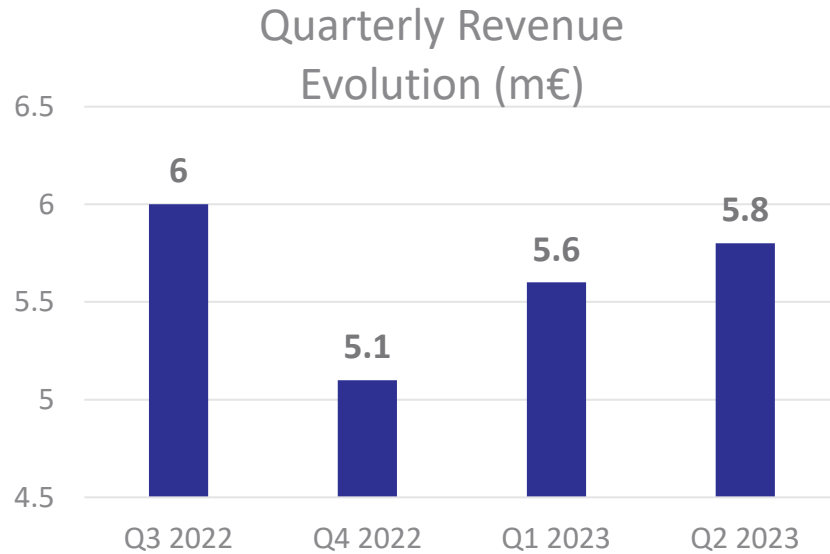
Imaging CRO Solutions and Services

Bringing more meaning to imaging data: Median's iSee[®] platform



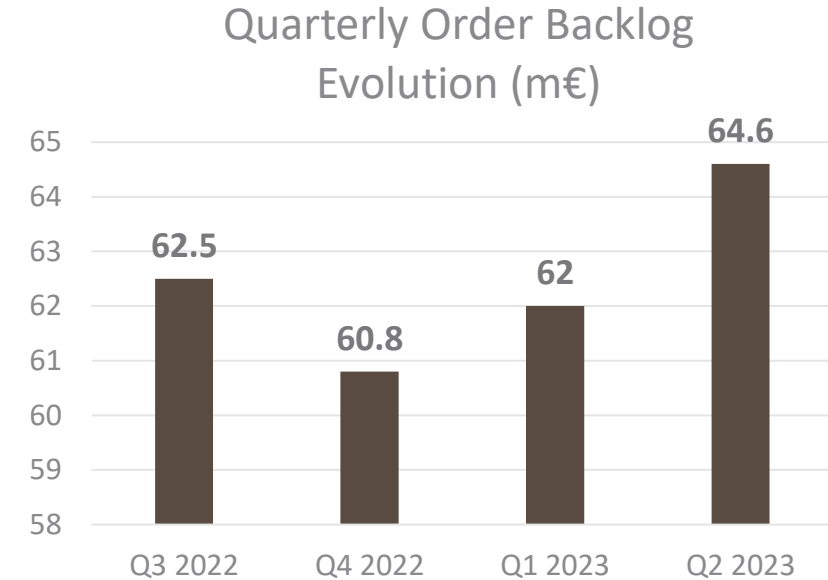
Confirmation of the iCRO Business Recovery in Q2, 2023

As of June 30, 2023 (unaudited figures)



Q2 2023 revenue at €5.8 million

Nota: company revenue comes from the iCRO activity, as iBiopsy® doesn't generate revenue at this stage (R&D)



Order backlog at €64.6 million

iCRO: Double-Digit Growth over the Next 10 years

- 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):
 - On-going sales team investment to drive increased awareness, deeper access within biopharma organizations,
 - Targeted effort at highest level to become preferred provider for Big Pharma with large clinical pipelines,
 - Targeted effort for tighter collaboration with CROs.
- Increase win rate on RFP's: from an average 20% to 40%:
 - Targeted effort for tighter collaboration with CROs, to increase their engagement for supporting Median's solutions,
 - Targeted effort to become preferred for Big Pharma, hence reducing competitive exposure.
- Add value to the proposals through differentiated unique add-on offer powered with AI.

Phase II & III Trials Continue to Drive the iCRO Momentum



235
Oncology Studies

33

Phase I
trials

114

Phase II
trials

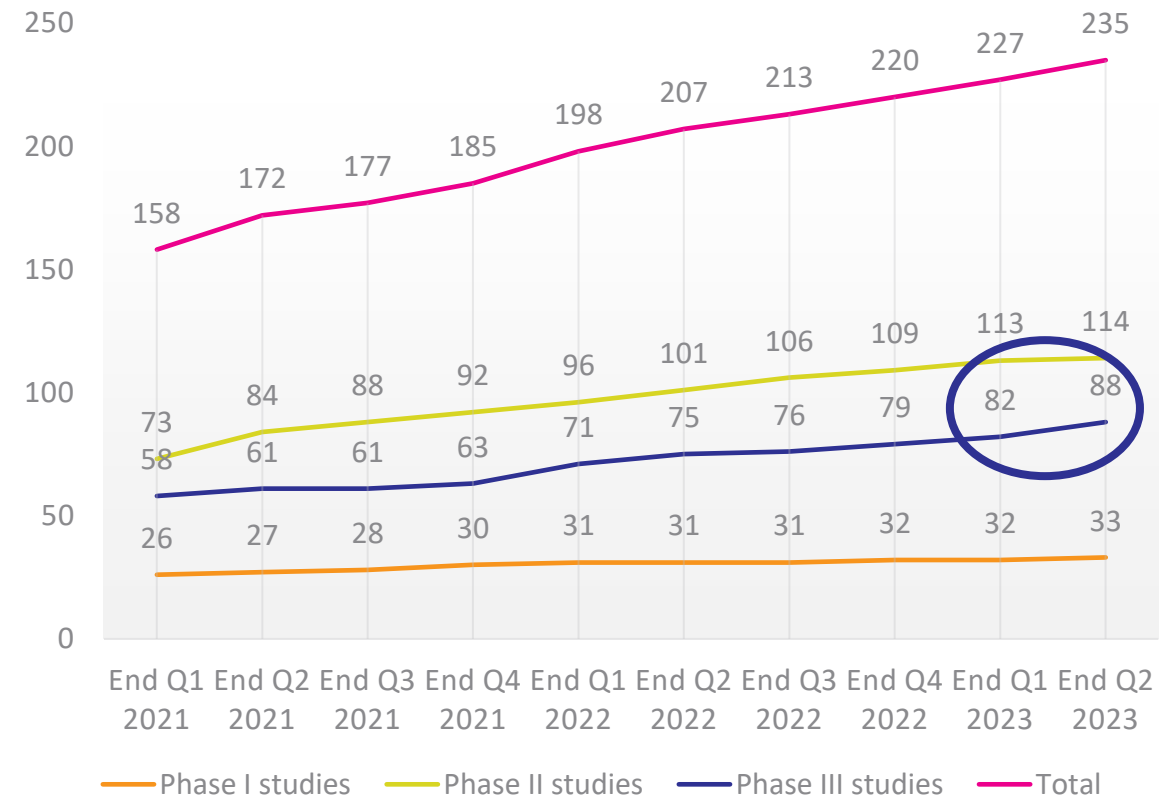
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Phase III
trials

As of June 30, 2023

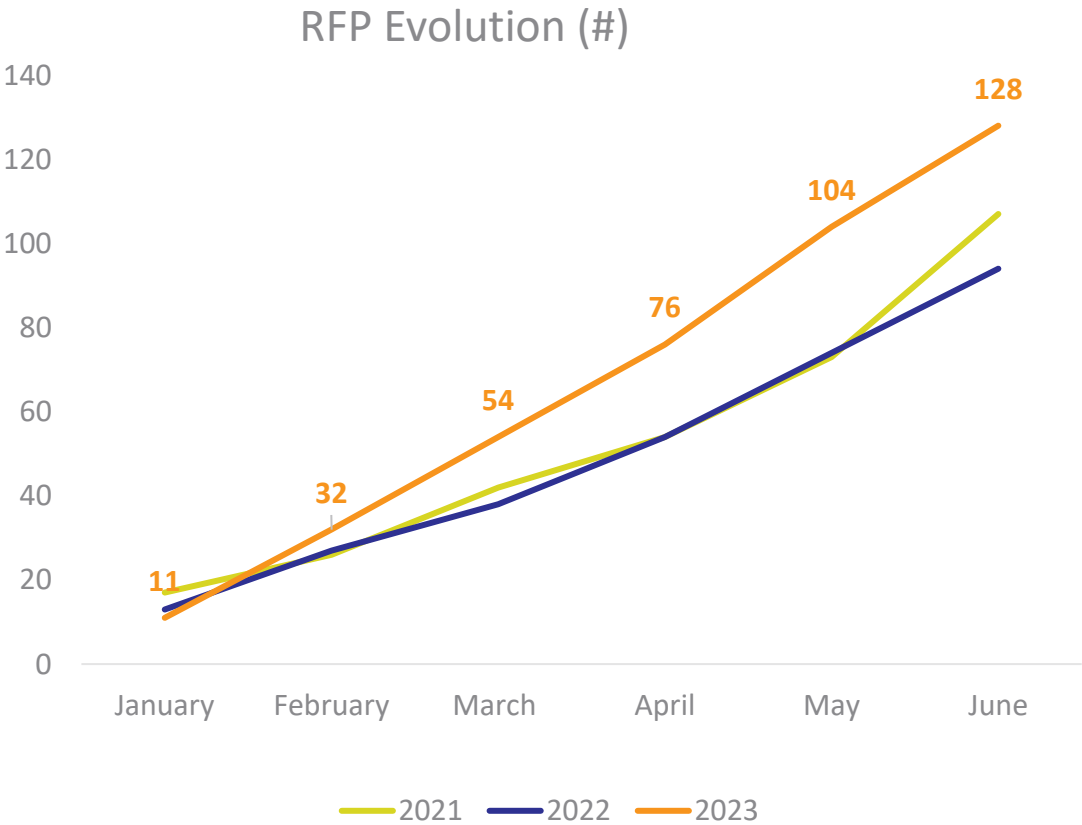
Cumulative contracted and less than 12-month awarded studies, since the beginning of the iCRO activity, and until June 30, 2023

Evolution of oncology studies managed by Median vs phases



iCRO Business Momentum

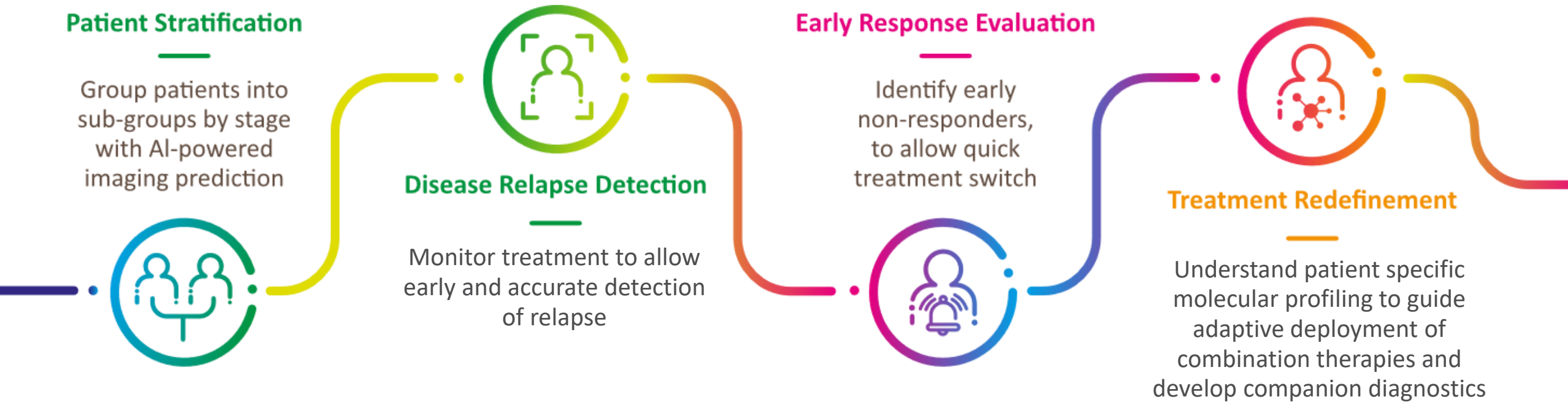
RFP Number and Win Rate Evolution



Win Rate (in value)

H1 2021	23%
H1 2022	29%
H1 2023	42%

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



1

**Continue to scale &
grow the core business**

2

**Become preferred
provider with
additional large
pharma companies**

3

**Strike Imaging Lab
deals with Top
Pharma Companies,
based on an Artificial
Intelligence offer**

Take-Away Messages

- iCRO business recovery expected to continue over the second half of 2023.
- iBiopsy[®] Lung Cancer Screening SaMD on track for US marketing authorization and product launch in 2024.
- Company financing outlook confirmed for 2025.



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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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