



# eyonis™ LCS

*Potentially disruptive Class II medical device  
for lung cancer screening (LCS)*

*eyonis™ LCS pivotal REALITY data  
What leading U.S. clinical experts are saying*

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**ALMDT**  
EURONEXT  
GROWTH

## Software as a Medical Device (SaMD)

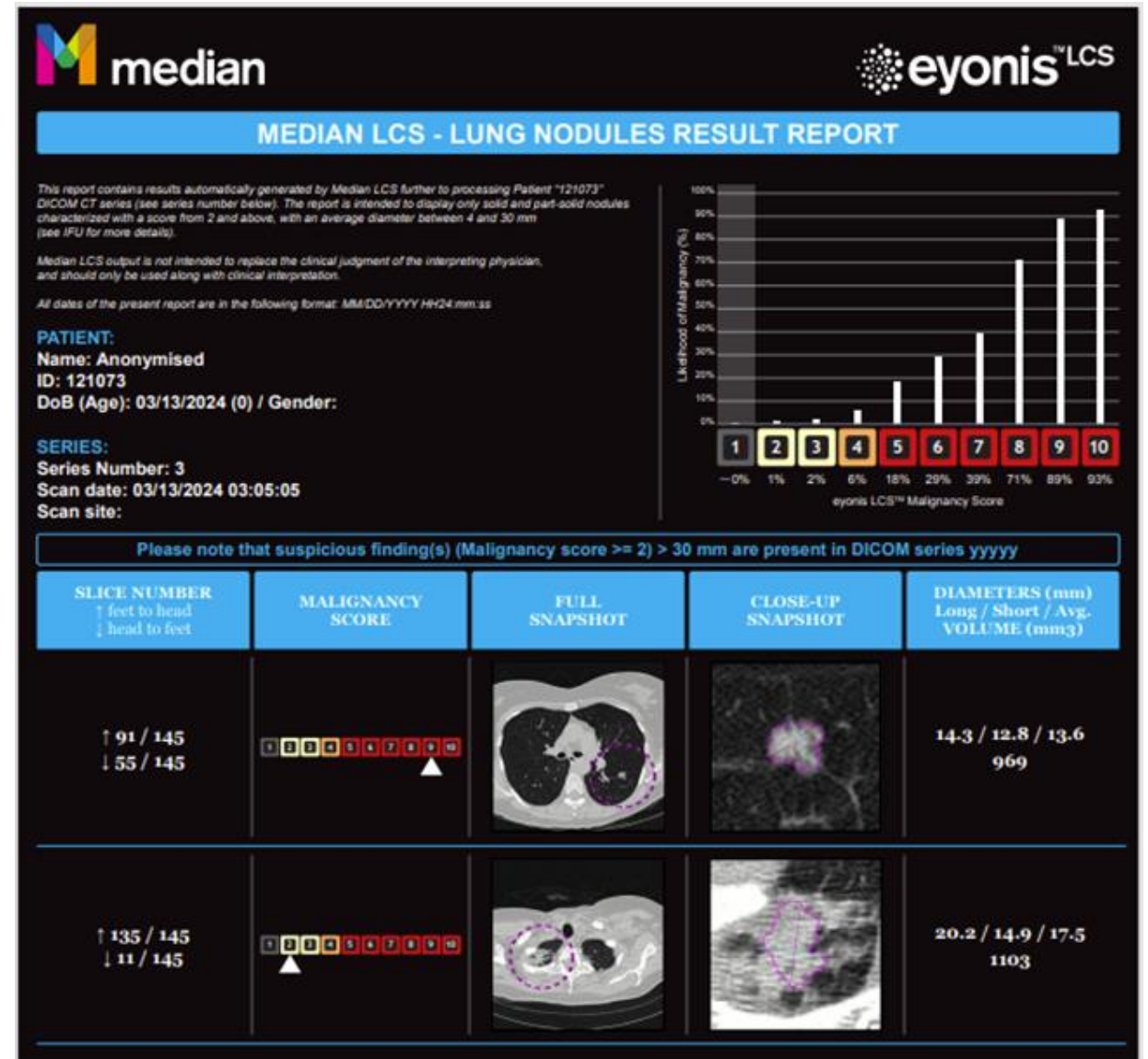
eyonis™ LCS is an AI/ ML tech-based SaMD candidate developed to improve diagnostic accuracy & efficiency of lung cancer screening (LCS)

LCS w/ LDCT alone is a tedious program leading to radiologists' stress & fatigue, hampering its implementation:

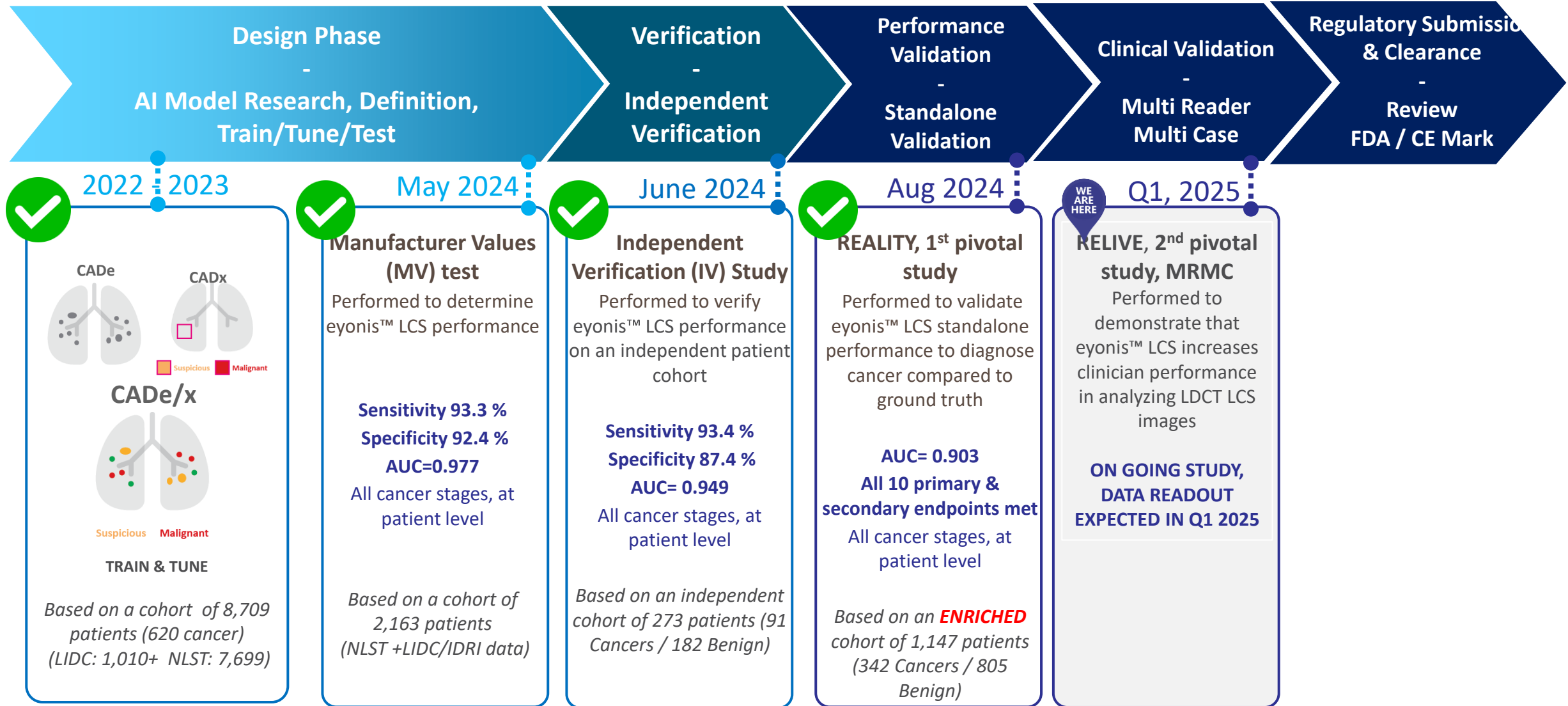
- Only 1 in 35 nodules examined is cancerous in average
- Early (Stage 1) lung cancers can be cured in 80-90% of patients but are often near the limit of detection with current methods
- Confirming cancer requires invasive biopsy procedures, which should not be performed unnecessarily
- Yet later stage lung cancers are associated with high mortality necessitating a more aggressive diagnostic approach

eyonis™ LCS could increase accuracy & efficiency even for challenging stage 1 cases at the limit of detection & characterization

eyonis™ LCS could empower healthcare professionals to implement lung cancer screening at scale while improving diagnostic accuracy, helping saving lives, reducing unnecessary invasive tests & preventing expensive best supportive care.

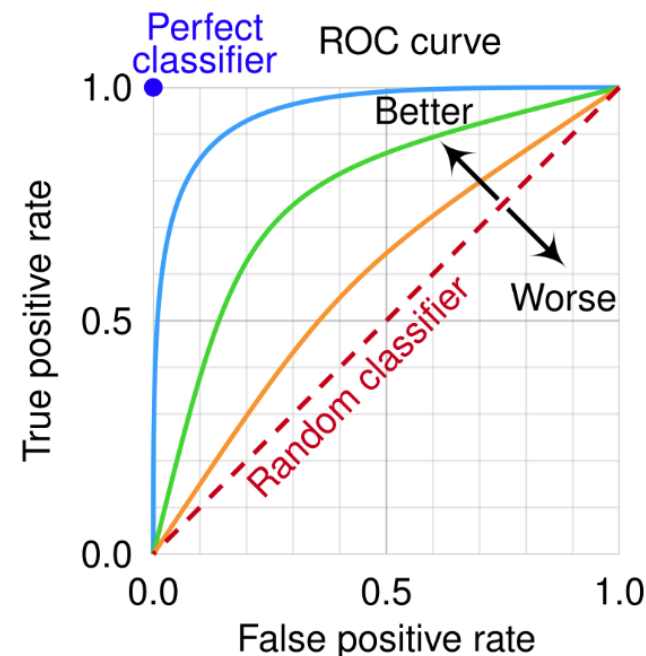


# eyonis™ LCS has achieved continuous success, supporting regulatory submissions in H1 2025



# Understanding sensitivity, specificity & AUC

- Diagnostic **accuracy** is determined by balancing between sensitivity (true positives) and specificity (false positives).
- To rigorously confirm accuracy of diagnostic devices under different conditions, a statistical method, known as the receiver operating characteristic (ROC) curve, is widely used to plot a device's sensitivity against its specificity and calculate the **area under the curve** (AUC).
- **AUC is widely accepted as a measure of accuracy**
  - For reference, a diagnostic test with low accuracy would have an AUC of 0.5 while a perfect test would have an AUC of 1.
  - AUC can be used to compare
    - Different types of diagnostic tests – like liquid biopsies
    - Competing SaMDs tested on similar (or the same) data sets
    - **Performance of the same SaMD on different types of data sets**, which is the focus herein for eyonis™ LCS



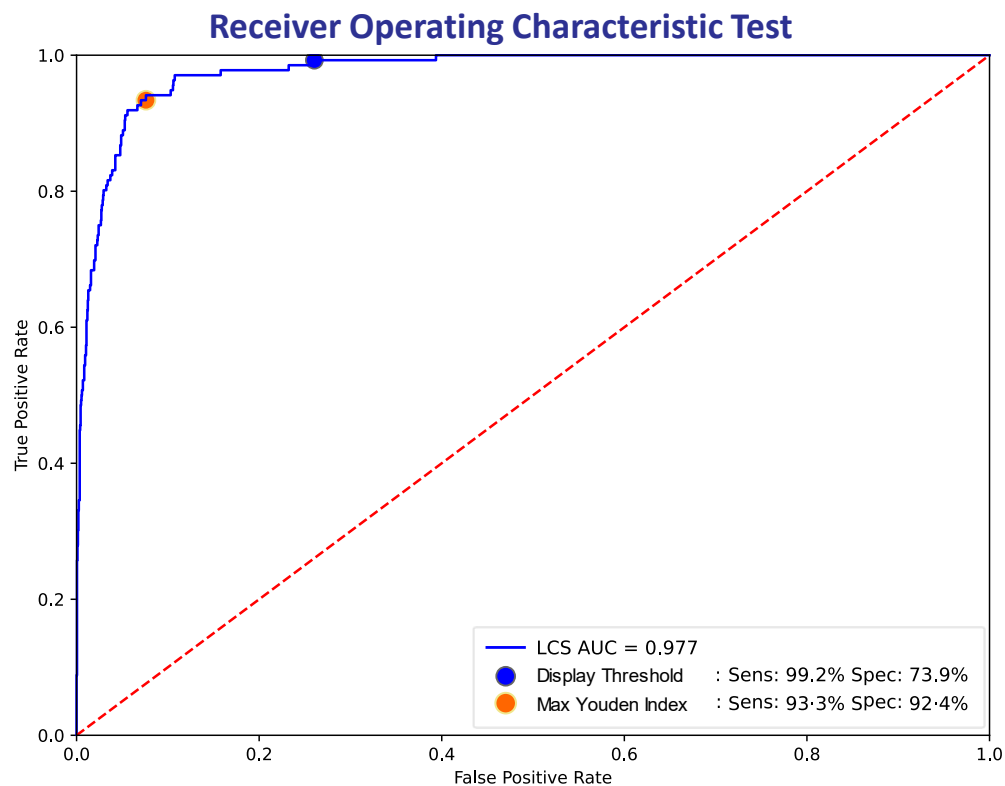
**Table 4.** Interpretation of the Area Under the Curve

Area under the curve (AUC)	Interpretation
$0.9 \leq \text{AUC}$	Excellent
$0.8 \leq \text{AUC} < 0.9$	Good
$0.7 \leq \text{AUC} < 0.8$	Fair
$0.6 \leq \text{AUC} < 0.7$	Poor
$0.5 \leq \text{AUC} < 0.6$	Fail

For a diagnostic test to be meaningful, the AUC must be greater than 0.5. Generally, an  $\text{AUC} \geq 0.8$  is considered acceptable.

# eyonis™ LCS Manufacturer Values - May 2024

End-to-end Lung Nodule Detection & Characterization with Outstanding Performance



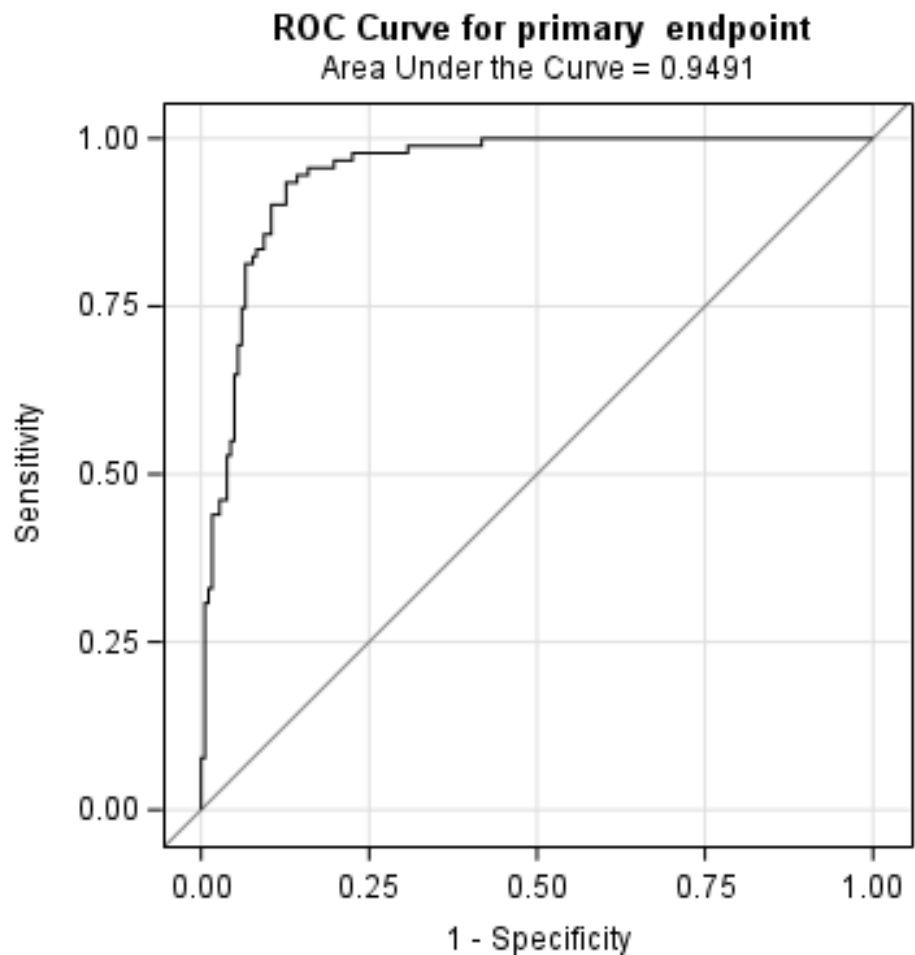
NLST test pop 1	
Population	B=2027 / C=136

2,163 US patients  
136 Cancers / 2,027 Benign

**AUC = 0.977**

	Sensitivity	Specificity
<b>Cancer / Non-Cancer Characterization (Max Youden Index)</b>	<b>93.3%</b>	<b>92.4%</b>
<b>Suspicious nodules Detection (Display Treshold)</b>	<b>99.2%</b>	<b>73.9%</b>

Extremely high AUC



273 US / EU patients  
91 Cancers / 182 Benign

**AUC = 0.949**

	Sensitivity	Specificity
Cancer / non-cancer Characterization (Max Youden Index)	93.4%	87.4%
Suspicious nodules Detection (Display Treshold)	98.9%	62.1%

# REALITY study at glance

## Cohort & Data Sources:

1,147 cases

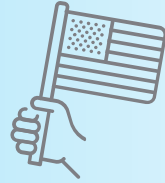


342 cancerous &

805 non-cancerous

**Ratio 1: 2.35 (x10 vs. real life)**

## Multinational multicentric study



**USA: 811 (70.7%)**



**EU: 336 (29.3%)**



Baptist Memphis: 251(21.9%)

FJD: 180 (15.7%)

Gradient: 91 (7.9%)

MD Anderson: 151 (13.2%)

Navarra: 156 (13.60%)

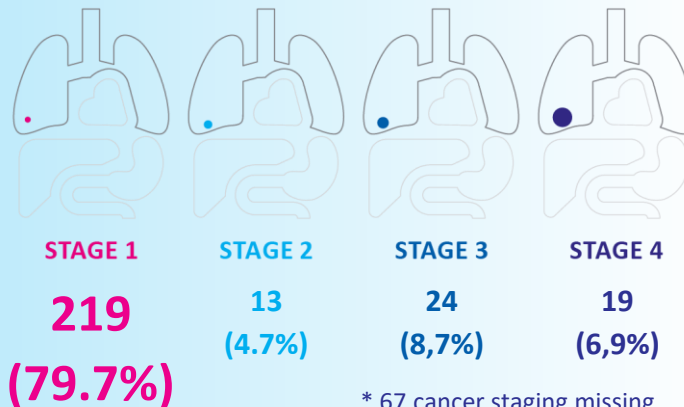
UPENN: 227 (19.79%)

VEGA: 91 (7.93%)

## Enrichment

- Enriched with **more cancer cases** than real life - **30% vs. 3%**
- Enriched with **difficult-to-diagnose cases** to stress test device's detection & characterization limits i.e. **small non-spiculated cancerous nodules & early cancer stages**

## Cancer staging\*



\* 67 cancer staging missing

## Nodule characteristics

**371 cancerous nodules**



**Non spiculated 120 (32.3%)**

**Spiculated 251 (67.7%)**

**Part-solid 57 (15.4%)**

**Solid 314 (84.6%)**

**Size 4-10 mm=70 (20.5%) malignant**

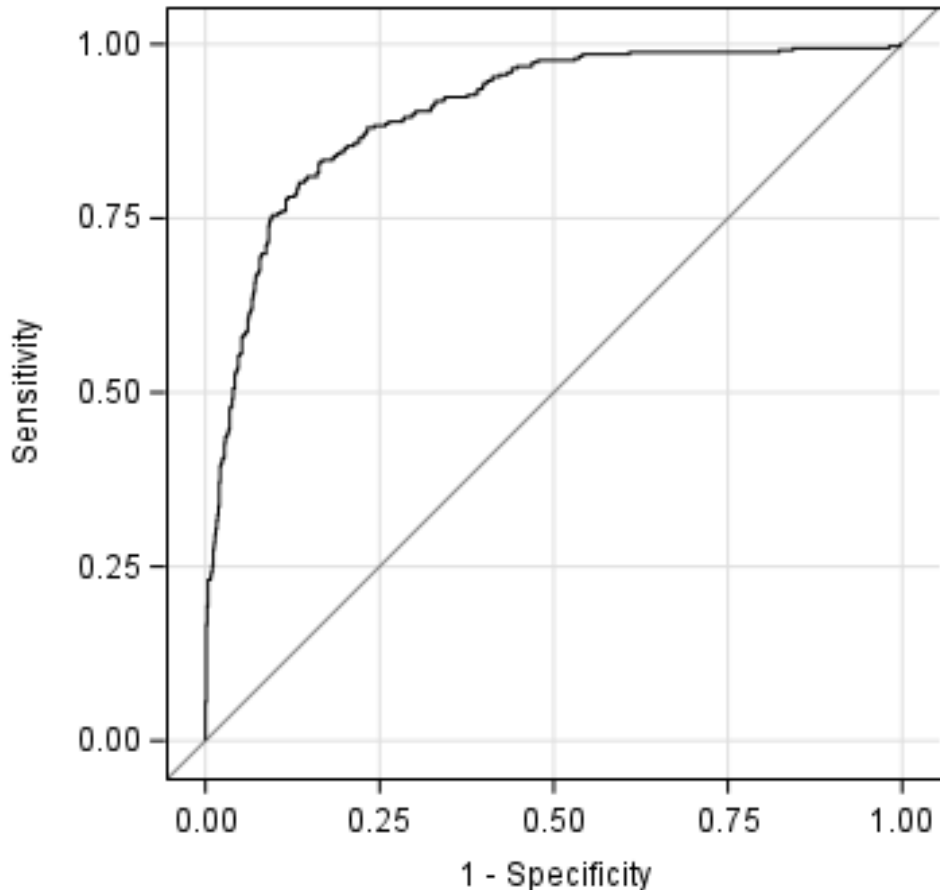
**Highly enriched population**

# REALITY study results – primary endpoint

High performance for detection & characterization of cancerous nodules in challenging population (highly enriched population) - primary endpoint met with excellent AUC

**ROC Curve for primary endpoint**

Area Under the Curve = 0.9035



1147 US / EU patients  
343 Cancers / 805 Benign



**AUC = 0.903**

	Sensitivity	Specificity
Cancer / non-cancer Characterization (Max Youden Index)	80.1%	86.6%
Suspicious nodules Detection (Display Treshold)	97.7%	51.2%



# REALITY study - all 10 objectives passed

Objective	Criteria	Results	Report features
Primary	H1: AUC of ROC (patient level) > 0.8	Statistically significant (P < 0.0001)	Malignancy Score
Secondary	H2: Sensitivity > 70% when Specificity=70%	Statistically significant (P < 0.0001)	Malignancy Score
Secondary	H3: Specificity > 70% when Sensitivity=70%	Statistically significant (P < 0.0001)	Malignancy Score
Secondary	H4: AUC of LROC > 0.75	Statistically significant (P < 0.0001)	Slice number "feet to head" & "head to feet" to ensure maximum compatibility with all viewers
Secondary	H5: Detection sensitivity>0.8 with average FP rate per scan<1	Statistically significant (P < 0.0001)	Full Snapshots – Close-up snapshot
Secondary	H6: ICC>0.8 for average diameter	Statistically significant (P < 0.05)	Dimensional information (LA Diameter mm, volume mm3)
Secondary	H7: ICC>0.8 for long axis diameter	Statistically significant (P < 0.05)	Dimensional information (LA Diameter mm, volume mm3)
Secondary	H8: ICC>0.8 for short axis diameter	Statistically significant (P < 0.05)	Dimensional information (LA Diameter mm, volume mm3)
Secondary	H9: ICC>0.75 for Volume	Statistically significant (P < 0.05)	Dimensional information (LA Diameter mm, volume mm3)
Secondary	H10: Dice coefficient > 0.7	Statistically significant (P < 0.0001)	Dimensional information (LA Diameter mm, volume mm3)

MEDIAN LCS - LUNG NODULES RESULT REPORT

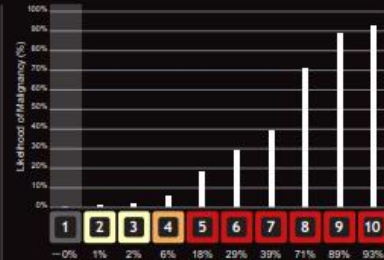
This report contains results automatically generated by Median LCS further to processing Patient "121073" DICOM CT series (see series number below). The report is intended to display only solid and part-solid nodules characterized with a score from 2 and above, with an average diameter between 4 and 30 mm (see IFU for more details).

Median LCS output is not intended to replace the clinical judgment of the interpreting physician, and should only be used along with clinical interpretation.

All dates of the present report are in the following format: MM/DD/YYYY HH:MM:ss

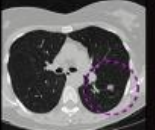
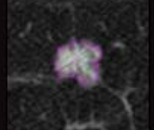
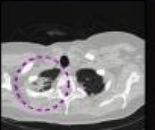
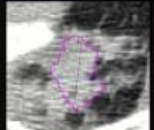
**PATIENT:**  
 Name: Anonymised  
 ID: 121073  
 DoB (Age): 03/13/2024 (0) / Gender:

**SERIES:**  
 Series Number: 3  
 Scan date: 03/13/2024 03:05:05  
 Scan site:



Score	Likelihood (%)
1	0%
2	0%
3	0%
4	10%
5	20%
6	30%
7	40%
8	70%
9	80%
10	90%

Please note that suspicious finding(s) (Malignancy score >= 2) > 30 mm are present in DICOM series yyyyy

SLICE NUMBER ↑ feet to head ↓ head to feet	MALIGNANCY SCORE	FULL SNAPSHOT	CLOSE-UP SNAPSHOT	DIAMETERS (mm) Long / Short / Avg. VOLUME (mm3)
↑ 91 / 145 ↓ 55 / 145	1 2 3 4 5 6 7 8 9 10			14.3 / 12.8 / 13.6 969
↑ 135 / 145 ↓ 11 / 145	1 2 3 4 5 6 7 8 9 10			20.2 / 14.9 / 17.5 1103

1.2.846.119664.2.55.5174395847271982478969439832583588751 - 850F

DOCUMENT GENERATED ON: 20240313 11:38:56

MEDIAN LCS version: 1.2368.152 - UID: xxx000352xxxx

INTERMEDIATE VERSION - NOT FOR FINAL USE

PAGE 1 OF 4

# KOL Discussion

Prof. Anil Vachani, MD, Hospital of the University of Pennsylvania

Prof. Javier Zulueta, MD, Icahn School of Medicine at Mount Sinai

Fredrik Brag, CEO of Median Technologies

# REALITY cohort description - nodule size distribution

High ratio of small cancerous nodules & low ratio of big cancerous nodules

Nodules sizes	Cancerous	Non cancerous
	(n=342)	(n=805)
# of cases with nodule size of [4-10 mm[ (or without nodule for b)	70 (20.5%)	680 (84.5%)
# of cases with nodule size of [10-20 mm[	203 (59.3%)	111 (13.8%)
# of cases with nodule size of [20-30 mm]	69 (20.2%)	14 (1.7%)

## REALITY vs. Independent Verification - nodule size distribution

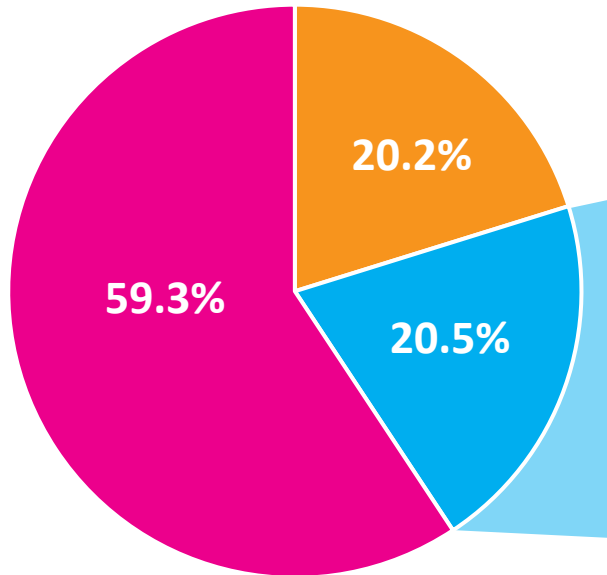
15% more patients w/ small cancerous nodules & 12% less patients w/ big cancerous

Nodules sizes	Cancerous in Standalone	Cancerous in IV
	(n=342)	(n=72)
# of cases with nodule size of [4- 10 mm[	70 (20.5%)	5 (5.5%)
# of cases with nodule size of [10-20 mm[	203 (59.3%)	57 (62.6%)
# of cases with nodule size of [20-30 mm]	69 (20.2%)	29 (31.9%)

# Focus on small cancerous nodules

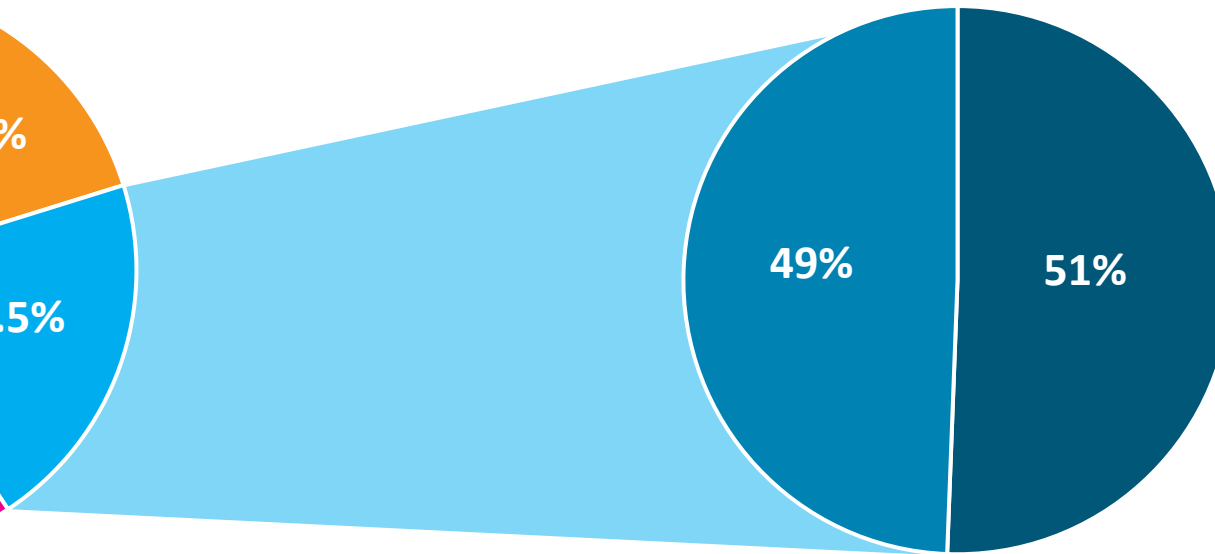
High ratio of small cancerous nodules (20.5%) and among them, almost half (49%) are non spiculated

Cancerous nodules size split



- Cases with nodule largest size in [20-30 mm]
- Cases with nodule largest size in [4-10 mm]
- Cases with nodule largest size in [10-20 mm]

Cancerous nodules 4 - 10 mm Margins split



- Spiculated
- Non-Spiculated

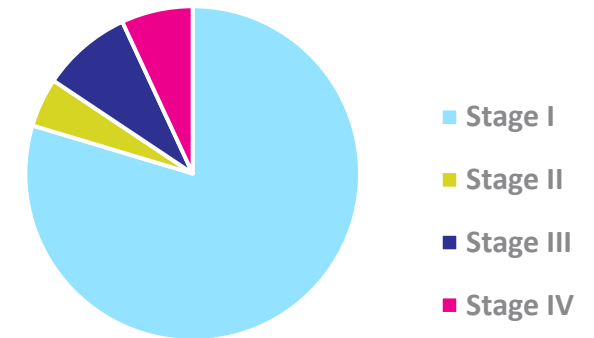
# REALITY cohort description - cancer stages

80% stage I within REALITY – very enriched, far above NLST (63%)

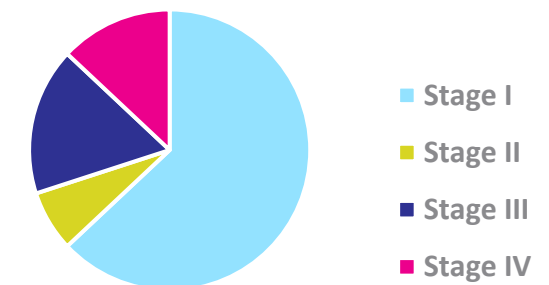
Cancer Stage	REALITY Cohort Cancerous cases	NLST Population Cancerous cases
Stage I	219 (79.7%)	63%
Stage II	13 (4.7%)	7%
Stage III	24 (8.7%)	17%
Stage IV	19 (6.9%)	13%
Total confirmed stage *	275 (100%)	100%

\*67 (19.5%) cancer stage was missing from patients' history forms

Cancer stage – REALITY cohort

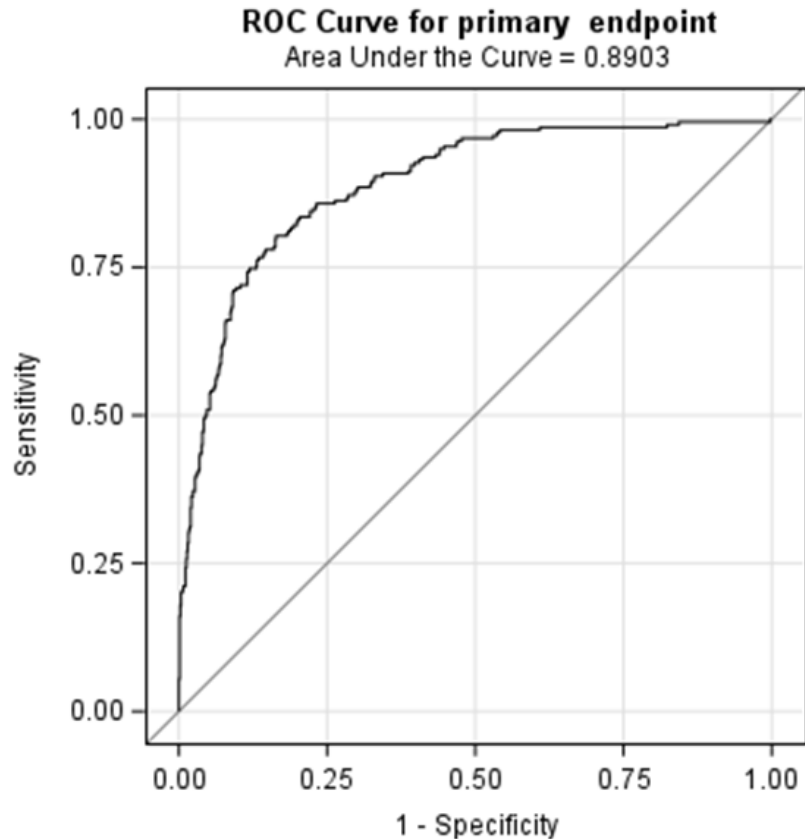


Cancer stage – NLST population



# REALITY study exploratory analysis - Cancer Stage I

Very good AUC of 0.890 (almost excellent)



**AUC = 0.89**

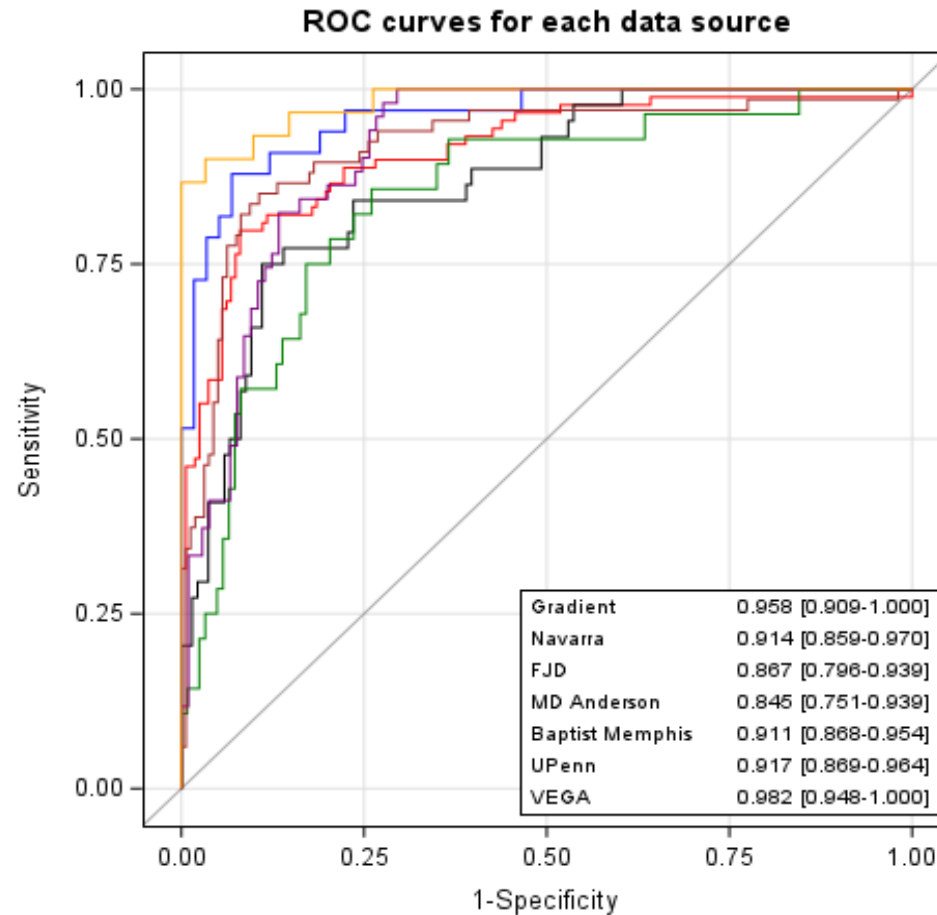
<b>N= 219 patients/cases</b>	<b>sensitivity</b>	<b>specificity</b>
<b>Cancer / non-cancer Characterization (Max Youden Index)</b>	80.4% (176 cases)	83.6%
<b>Suspicious nodules Detection (Display Treshold)</b>	96.8% (212 cases)	51.2%



**+36 cases (16.4%) with a suspicious nodule detected which will be more closely followed up**

# REALITY study exploratory analysis - centers

Different AUCs according to centers with spread from 0.845 to 0.982



**AUC > 0.95**

— Gradient

— VEGA

**AUC > 0.90 and < 0.95**

— Navarra

— Baptist Memphis

— UPenn

**AUC < 0.90**

— FJD

— MD Anderson

# Lung Cancer Screening challenges & opportunities

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

## Facts & figures

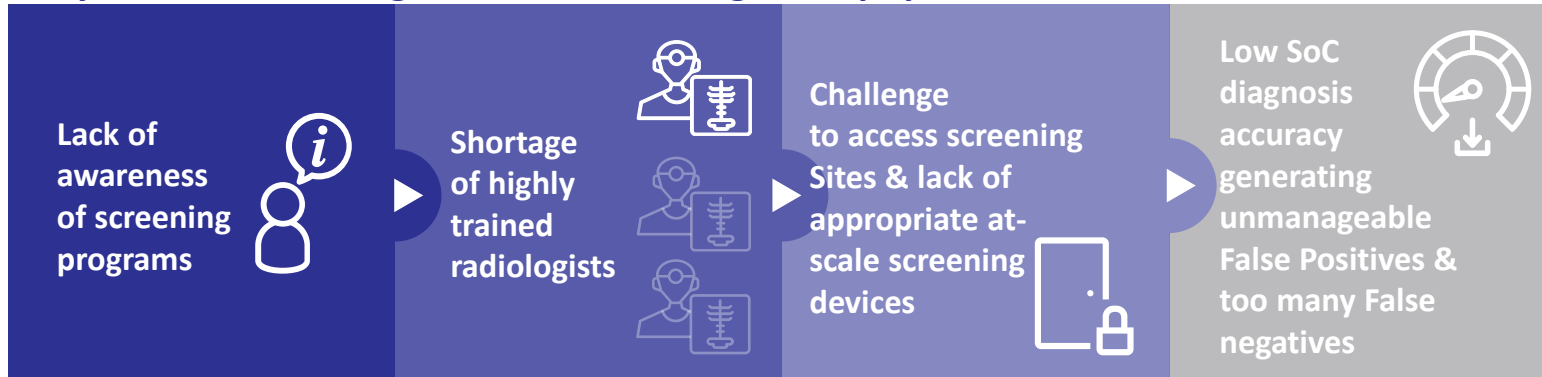


- **1st cancer killer worldwide:** 1.8M deaths 2022 (19% of all cancer deaths), 2.4M deaths projected in 2030<sup>(2)</sup>
- **18% 5-year survival rate:** <25% stage 1 cases (68%-92% survival<sup>(3,4)</sup>) >40% stage 4 cases (<10% 5-year survival<sup>(4)</sup>)
- **Rising frequency among never-smokers** (20% US & UK)<sup>(4)</sup>
- **4.5% LCS compliance**<sup>(5)</sup>
- Rising frequency **among never-smokers**<sup>(3)</sup>
- **New CPT code \$650 for AI quantitative CT tissue characterization in the US**

## Screening programs

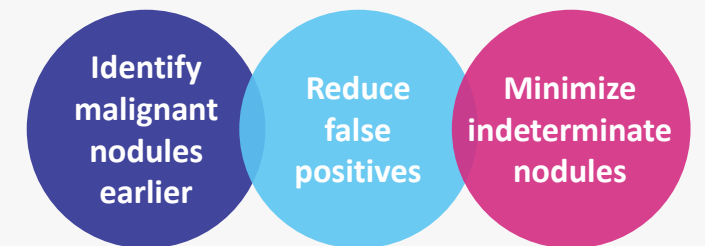
LCS programs implemented		Target population
US	USPSTF guidelines	15M (USPSTF 2021 recommendations) Near future 30M
Europe	UK Poland Croatia Developing in IT/DE/FR	EU T5: 22M (Estimate)
Asia	South Korea & China regionally Japan in study phase	ASIA T3: 100M (Estimate)

## Why is LDCT screening % so low in the high-risk populations?



## Why eyonis™ LCS?

### Seamlessly & effortlessly

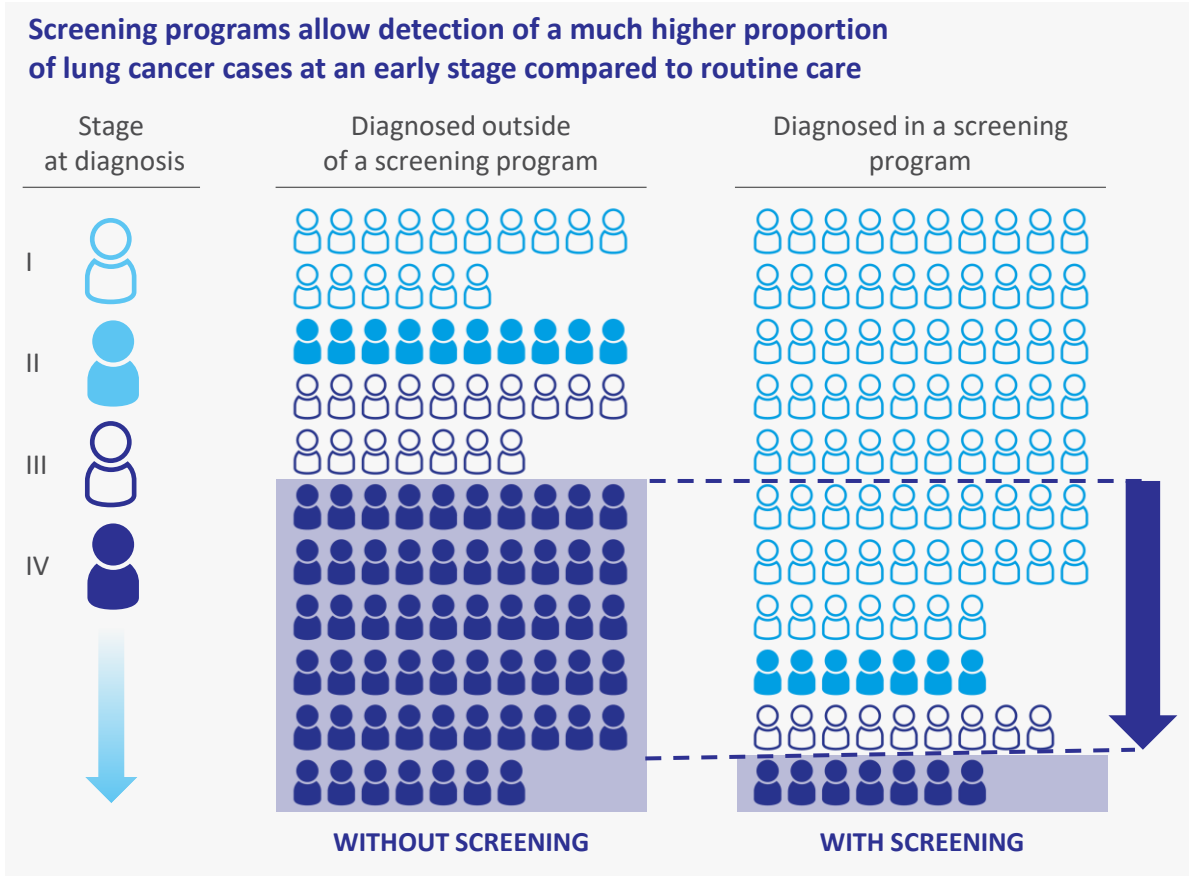


Sources:  
 [1] [https://www.redjournal.org/article/S0360-3016\(19\)30110-5/fulltext](https://www.redjournal.org/article/S0360-3016(19)30110-5/fulltext)  
 [2] Cancer Tomorrow, IARC, Global Cancer Observatory 2020 - WHO  
 [3] <https://www.lungambitionalliance.com/our-initiatives/lung-cancer-screening-the-cost-of-inaction.htm>  
 [4] <https://nrd.support.acr.org/support/solutions/articles/11000093991-lcsr-state-reports>



# Landmark clinical studies demonstrated LDCT high value

NLST & NELSON clinical studies results revealed stage shift with annual LDCT & I-ELCAP study showed highest survival when diagnosed at stage 1 - AI LDCT will further increase this trend



- **NELSON** trial showed LDCT screening impact: **59% cases were early-stage** vs 14% with no screening
- **24% reduction of lung cancer mortality after 10-years** vs no screening
- **NLST** showed a **20% deaths decrease** with LDCT screening vs chest X-Ray

**Significant stage shift leading to earlier & better patient care and lower mortality rate**

Adapted from Sands et al. (2021). Patient decision-making aid based on combined analysis of existing clinical trials.

NLST: US based National Lung Screening Trial (53454 participants, 2002-2004)  
NELSON: Dutch-Belgian Randomized Lung Cancer Screening Trial (15792 participants, 2004-2012)  
LDCT: Low Dose Computed Tomography

# Patient example #1

From probably benign to very suspicious

**MEDIAN LCS - LUNG NODULES RESULT REPORT**

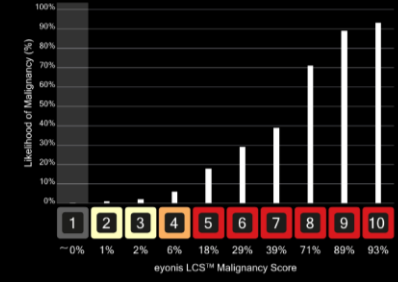
*This report contains results automatically generated by Median LCS further to processing Patient "214640" DICOM CT series (see series number below). This report displays only solid and part-solid nodules characterized with a score from 2 and above, and with an average diameter between 4 and 30 mm (see IFU for more details).*

*Median LCS output is not intended to replace the clinical judgment of the interpreting physician, and should only be used along with clinical interpretation.*

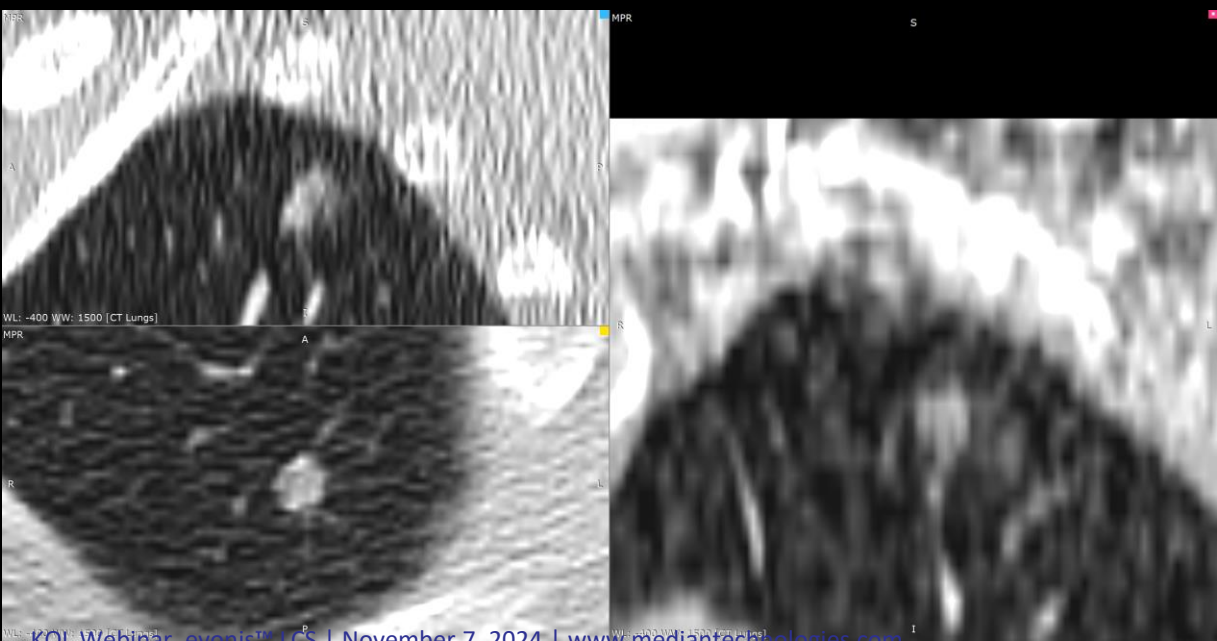
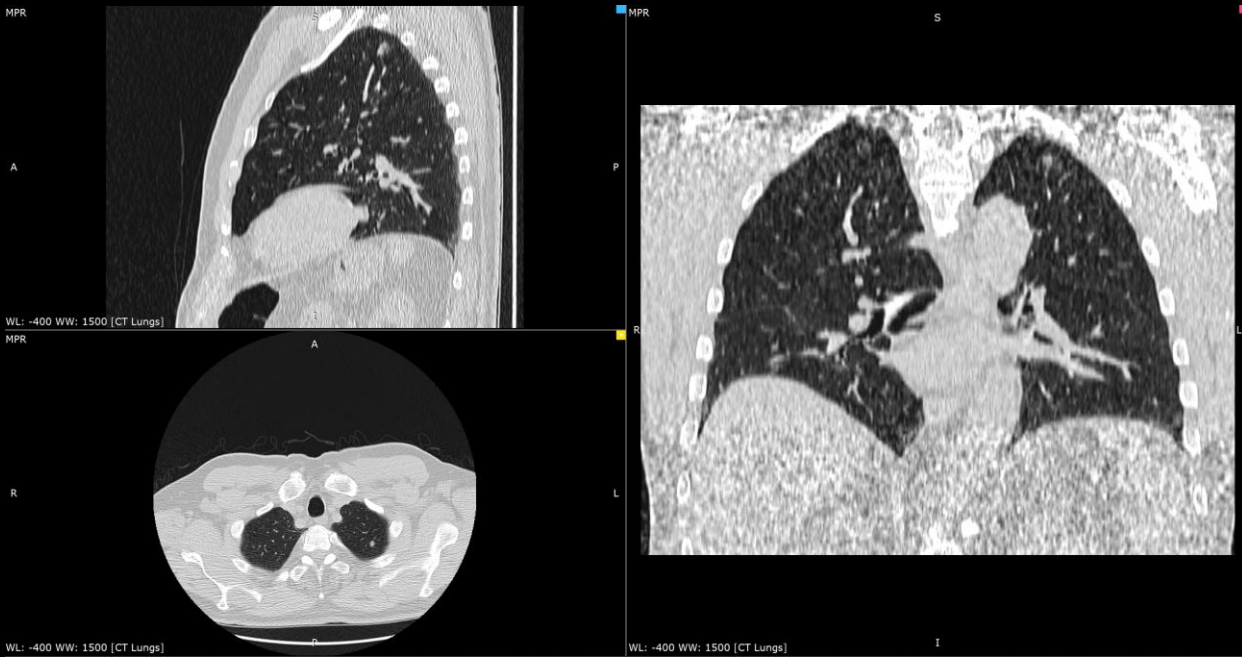
*All dates of the present report are in the following format: MM/DD/YYYY HH:MM:ss*

**PATIENT:**  
 Name: Anonymised  
 ID: 214640  
 DoB (Age): 06/28/2024 (0) / Gender:

**SERIES:**  
 Series number: 3  
 Scan date: 06/28/2024 09:17:51  
 Scan site:



SLICE NUMBER	MALIGNANCY SCORE	FULL SNAPSHOT	CLOSE-UP SNAPSHOT	DIAMETERS (mm) Long / Short / Avg. VOLUME (mm3)
↑ feet to head ↓ head to feet	1 2 3 4 5 6 7 8 9 10			7.3 / 6 / 6.7 168
↑ 121 / 139 ↓ 19 / 139				



### Difficult-to-diagnose nodule case 1: Solid nodule ≥ 6 to < 8 mm in apex area

	Lung Rads 2019	Lung Rads 2022	eyonis™ LCS
<b>Score</b>	3	3	5
<b>Estimated risk of malignancy</b>	1-2% Probably Benign	Not reported Probably Benign	18% Very Suspicious
<b>Recommended Follow-up</b>	6-month LDCT	6-month LDCT	Swift additional diagnostics: Chest CT W/ or W/out contrast and/or PET/CT and/or tissue sampling

**MEDIAN LCS - LUNG NODULES RESULT REPORT**

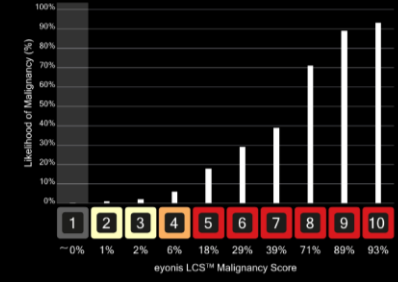
*This report contains results automatically generated by Median LCS further to processing Patient "214640" DICOM CT series (see series number below). This report displays only solid and part-solid nodules characterized with a score from 2 and above, and with an average diameter between 4 and 30 mm (see IFU for more details).*

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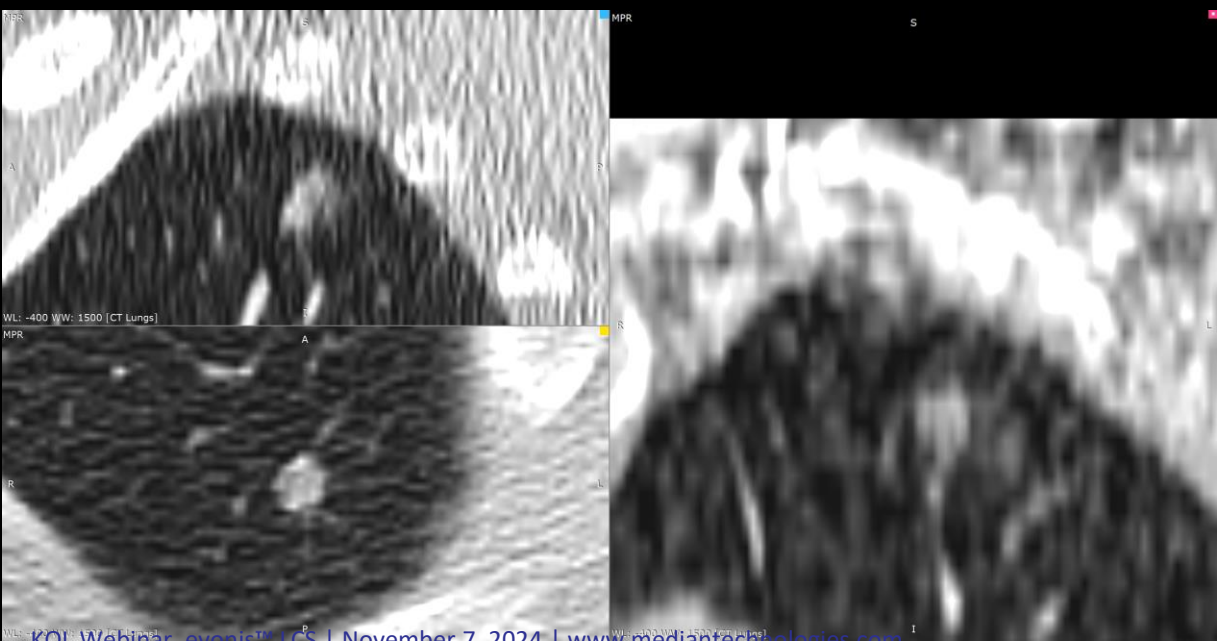
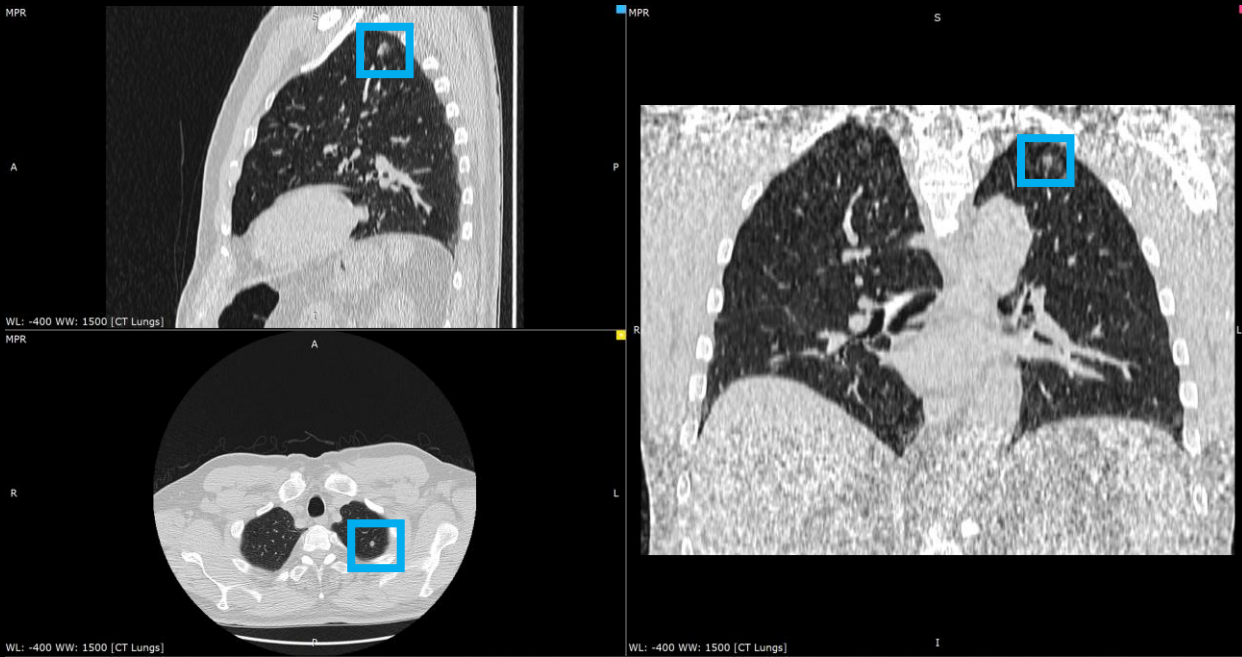
*All dates of the present report are in the following format: MM/DD/YYYY HH:MM:ss*

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 ID: 214640  
 DoB (Age): 06/28/2024 (0) / Gender:

**SERIES:**  
 Series number: 3  
 Scan date: 06/28/2024 09:17:51  
 Scan site:



SLICE NUMBER	MALIGNANCY SCORE	FULL SNAPSHOT	CLOSE-UP SNAPSHOT	DIAMETERS (mm) Long / Short / Avg. VOLUME (mm3)
↑ feet to head ↓ head to feet				7.3 / 6 / 6.7 168



### Difficult-to-diagnose nodule case 1: Solid nodule ≥ 6 to < 8 mm in apex area

	Lung Rads 2019	Lung Rads 2022	eyonis™ LCS
<b>Score</b>	3	3	5
<b>Estimated risk of malignancy</b>	1-2% Probably Benign	Not reported Probably Benign	18% Very Suspicious
<b>Recommended Follow-up</b>	6-month LDCT	6-month LDCT	Swift additional diagnostics: Chest CT W/ or W/out contrast and/or PET/CT and/or tissue sampling

# Patient example #2

From suspicious to probably benign

**MEDIAN LCS - LUNG NODULES RESULT REPORT**

This report contains results automatically generated by Median LCS further to processing Patient "109682" DICOM CT series (see series number below). This report displays only solid and part-solid nodules characterized with a score from 2 and above, and with an average diameter between 4 and 30 mm (see IFU for more details).

Median LCS output is not intended to replace the clinical judgment of the interpreting physician, and should only be used along with clinical interpretation.

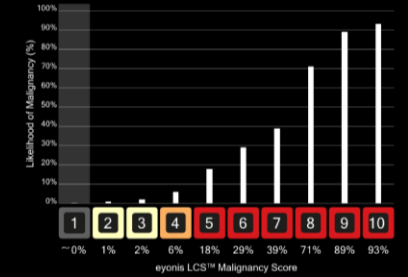
All dates of the present report are in the following format: MM/DD/YYYY HH:MM:ss

**PATIENT:**

Name: Anonymised  
 ID: 109682  
 DoB (Age): 06/28/2024 (0) / Gender:

**SERIES:**

Series number: 2  
 Scan date: 06/28/2024 09:42:04  
 Scan site:



SLICE NUMBER	MALIGNANCY SCORE	FULL SNAPSHOT	CLOSE-UP SNAPSHOT	DIAMETERS (mm) Long / Short / Avg. VOLUME (mm3)
↑ 47 / 146 ↓ 100 / 146	1 2 3 4 5 6 7 8 9 10			10.3 / 8.7 / 9.5 289

**Difficult-to-diagnose nodule case 2:  
 Nodule ≥ 8 to < 15 mm w/ solid component 289 mm<sup>3</sup>**

	Lung Rads 2019	Lung Rads 2022	eyonis™ LCS
<b>Score</b>	<b>4A</b>	<b>4A</b>	<b>2</b>
<b>Estimated risk of malignancy</b>	<b>5-15% Suspicious</b>	<b>Not reported Suspicious</b>	<b>1% Lowly Suspicious</b>
<b>Recommended Follow-up</b>	<b>3-month LDCT and PET/CT since &gt; 268 mm<sup>3</sup></b>	<b>3-month LDCT and PET/CT since &gt; 268 mm<sup>3</sup></b>	<b>6-month LDCT</b>

**MEDIAN LCS - LUNG NODULES RESULT REPORT**

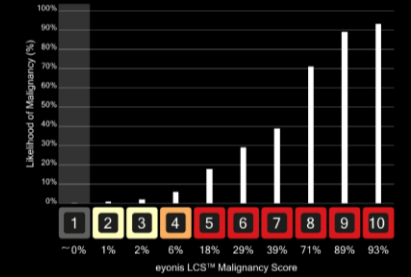
This report contains results automatically generated by Median LCS further to processing Patient "109682" DICOM CT series (see series number below). This report displays only solid and part-solid nodules characterized with a score from 2 and above, and with an average diameter between 4 and 30 mm (see IFU for more details).

Median LCS output is not intended to replace the clinical judgment of the interpreting physician, and should only be used along with clinical interpretation.

All dates of the present report are in the following format: MM/DD/YYYY HH:MM:ss

**PATIENT:**  
 Name: Anonymised  
 ID: 109682  
 DoB (Age): 06/28/2024 (0) / Gender:

**SERIES:**  
 Series number: 2  
 Scan date: 06/28/2024 09:42:04  
 Scan site:



Slice Number	Malignancy Score	Full Snapshot	Close-up Snapshot	Diameters (mm) Long / Short / Avg. Volume (mm <sup>3</sup> )
↑ 47 / 146 ↓ 100 / 146	1 2 3 4 5 6 7 8 9 10			10.3 / 8.7 / 9.5 289

**Difficult-to-diagnose nodule case 2:  
 Nodule ≥ 8 to < 15 mm w/ solid component 289 mm<sup>3</sup>**

	Lung Rads 2019	Lung Rads 2022	eyonis™ LCS
<b>Score</b>	4A	4A	2
<b>Estimated risk of malignancy</b>	5-15% Suspicious	Not reported Suspicious	1% Lowly Suspicious
<b>Recommended Follow-up</b>	3-month LDCT and PET/CT since > 268 mm <sup>3</sup>	3-month LDCT and PET/CT since > 268 mm <sup>3</sup>	6-month LDCT

# eyonis™ LCS next steps



Relive MRMC clinical study, regulatory filings & US pre-commercial GotoMarket activities

	2022		2023		2024		2025	
	1st Half	2nd Half	1st Half	2nd Half	1st Half	2nd Half	1st Half	2nd Half
<b>Lung Cancer Screening (LCS)</b>	CADE/CADx Development			Indep. Verif.				
		Pivotal study protocol definition	Reality & Relive Pivotal studies initiation	Reality & Relive Pivotal studies execution				
		Interactions with FDA (513g, Q-Subs)					Regulatory filling & review	
eyonis™ LCS Standalone Study (MT-LCS-002, REALITY)					Finalized - All primary and secondary endpoints successfully passed			
eyonis™ LCS Multi-Reader Multi-Case Study (MRMC, MT-LCS-004, RELIVE)					Progressing as planned. Topline data expected in Q1 2025			
CADE/CADx SaMD eyonis™ LCS filing (FDA 510(k))					In preparation Scheduled for submission in H1 2025			
CADE/CADx SaMD eyonis™ LCS filing (CE mark)					In preparation Scheduled for submission in H1 2025			
Pre-Commercial activities					First centers installations Q2/3 2025			
Market Access & Reimbursement roll-out					GtM deployment Q2/3 2025			





**ALMDT**  
EURONEXT  
GROWTH

## 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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