

# Improve Patient Trial Enrollment with **NeXT Personal<sup>®</sup>** MRD Liquid Biopsy

*Featuring new data from ESMO 2023*

TG  
TTCTACA  
TGCTCCAC  
CACTGC  
CTACACCG  
TTCTACAC  
TGCTCCAC  
CACTGCTCCC  
CTACACCGC  
TGCTCCCACT  
ATTTCTACA  
TTCTACACCGCTG  
TGT**MRD**CCA  
CACCTCCATGCACT  
ATTTCTACACCGCTGTGCTCC  
GGTATTTCTACTCCCACT  
CGCTGTGCTCCCACT



# See why **ctDNA ultra-sensitivity** matters for your clinical trial

New Data presented at ESMO 2023: **Lung TRACERx**

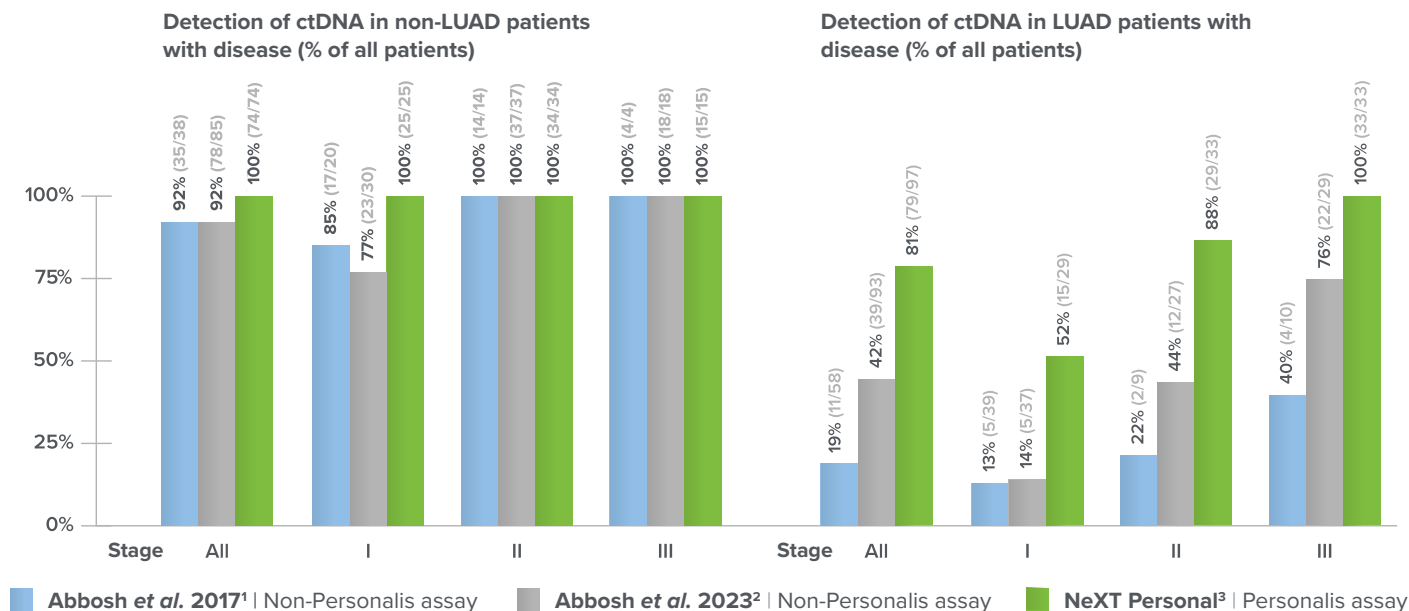
**What is lung TRACERx?** One of the most robust ctDNA studies for early-stage non-small cell lung cancer (NSCLC) with **170+ patients** in the Personalis cohort collected with **median 5 years of follow-up**, analyzed retrospectively.

**Cancer types:**  
adenocarcinoma (LUAD),  
non-adenocarcinoma (non-LUAD)

**Stages:** IA-IIIa









NeXT Personal showed up to **4X higher sensitivity** in baseline pre-surgery LUAD compared to non-Personalis, previous generation assays and 100% detection in non-LUAD patients.<sup>1-4</sup>



→ Adenocarcinoma has been historically considered a low-shedding tumor and hard to track with previous generation MRD assays.<sup>3</sup>

→ NeXT Personal's ultra-sensitivity has been proven to track low-shedding tumors, like LUAD

# Tracking more variants enabled higher sensitivity **without compromising specificity**<sup>1-4</sup>

Study name	Limit of detection (LOD95)*	Variants tracked	Median lead time from ctDNA detection to radiographic recurrence**
Personalis Black et al., 2023 ESMO presentation <sup>3</sup>	4 PPM***	Up to 1800 	~ <b>6 months</b> (173 days) 
Non-Personalis assay Abbosh et al., 2023, Nature <sup>2</sup>	~80 PPM***	Up to 200 	~ <b>4 months</b> (119 days) 
Non-Personalis assay Abbosh et al., 2017, Nature <sup>1</sup>	~100 PPM***	Up to 22 <sup>5</sup> 	~ <b>2 months</b> (70 days) 

\*estimated ctDNA fraction which would be detected in 95% of replicates

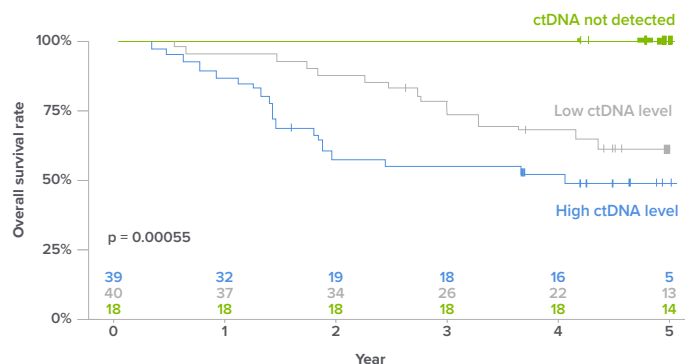
\*\*For median lead time evaluation across Abbosh '17, Abbosh '23, and this study, while the patients were drawn from the TRACERx cohort, the specific patients analyzed may be different, which may lead to potential differences in: duration of follow-up, frequency and timing of blood draws, frequency and timing of imaging, etc.

\*\*\* Parts Per Million

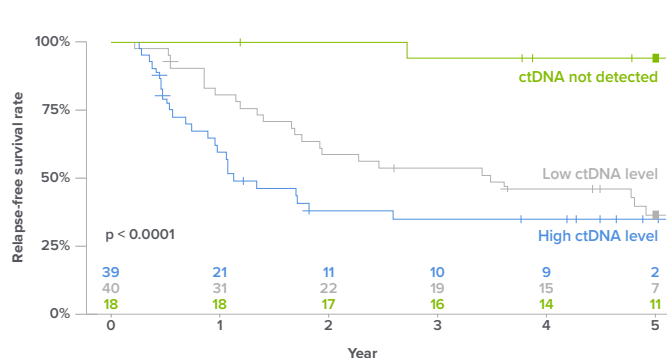
## NeXT Personal could help stratify for low, medium, and high risk of recurrence

The study demonstrated that pre-surgical, single time point ctDNA levels with NeXT Personal could be used to classify early-stage lung cancer patients into lower- and higher-recurrence risk groups.<sup>3</sup>

**Overall survival (OS) in LUAD Patients from pre-surgical ctDNA levels**



**Relapse-free survival (RFS) in LUAD Patients from pre-surgical ctDNA levels**



→ Non-detected pre-surgical ctDNA demonstrated **100% 5-year OS and 94% 5-year RFS**

→ Low ctDNA defined as below cohort median value of 260 PPM; and high ctDNA as above that median



# Detect high-risk patients with ultra-low levels of ctDNA, even in low shedding tumors



NeXT Personal may provide **highly accurate stratification of patients** for efficient enrollment

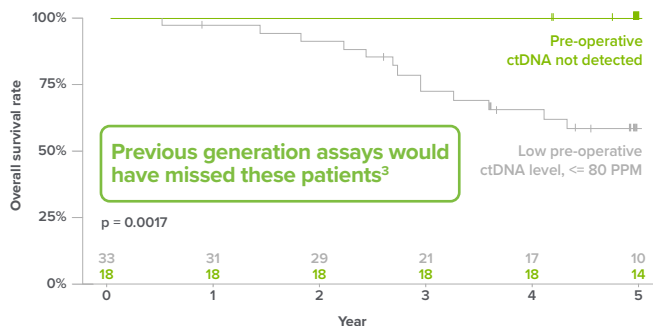


NeXT Personal could **reduce trial time and cost** by finding MRD-positive patients faster

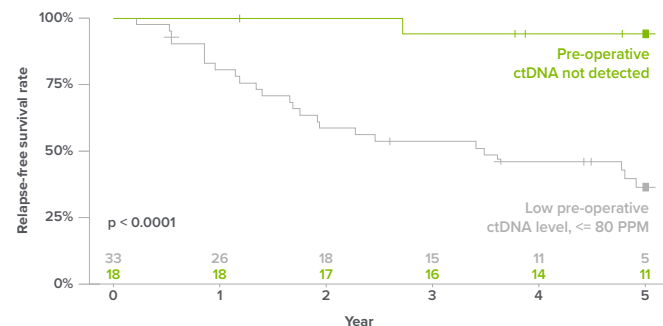


TRACERx data analysis showed that the **ultra-low levels of ctDNA detection** enabled by NeXT Personal were critical to determining patient recurrence risk and a crucial component of stratifying patient outcomes.<sup>3</sup>

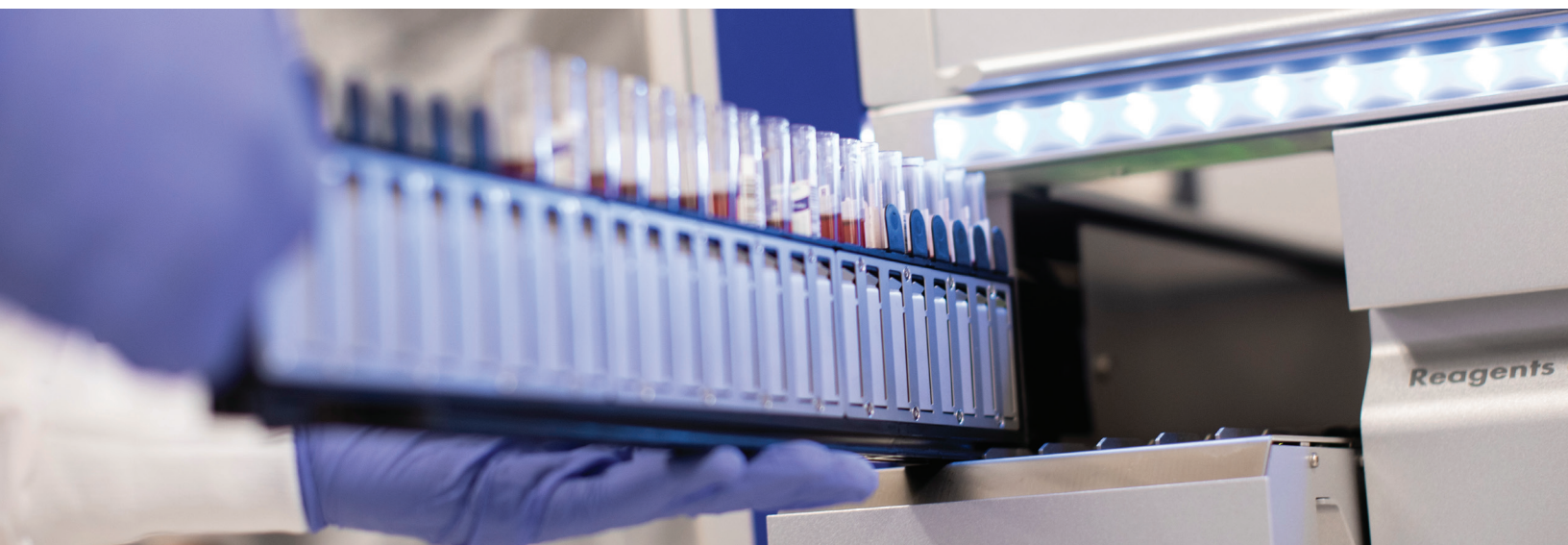
OS in sub-80 PPM ctDNA-positive LUAD Patients



RFS in sub-80 PPM ctDNA-positive LUAD Patients



- NeXT Personal's ultra-sensitivity detected tumor fractions sub-80 PPM, **missed by previous generation assays**
- Even sub-80 PPM tumor fraction was predictive of poor outcomes

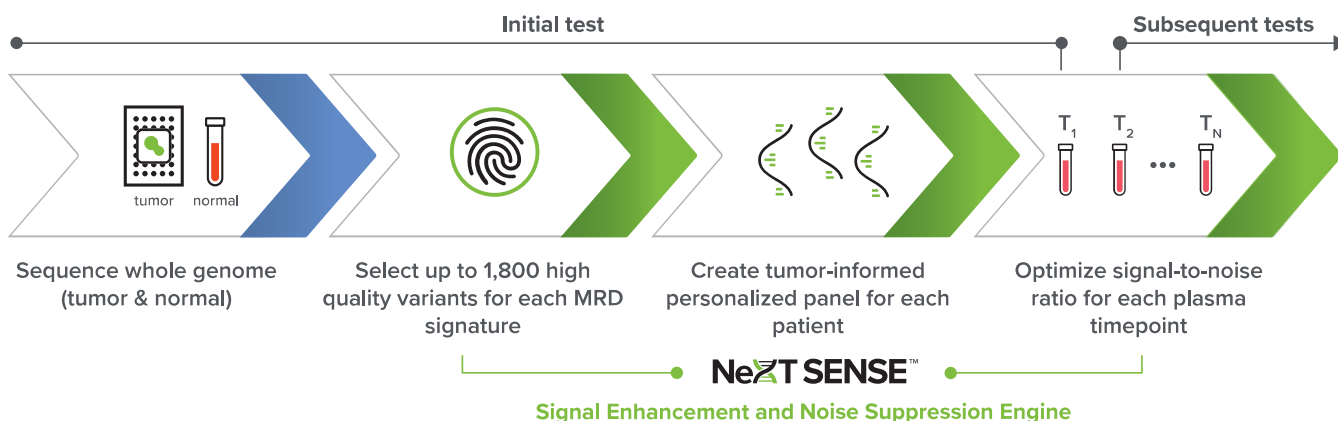


# NeXT Personal technology

NeXT Personal® is one of the most advanced, tumor-informed liquid biopsy assays that is designed to achieve 10x-100x the analytical sensitivity of previous generation assays through our patented Whole-Genome powered algorithm.



The NeXT Personal technology leverages whole genome sequencing and advanced noise suppression with **NeXT SENSE™ technology** to identify a unique genetic signature derived from a patient's tumor based on up to **~1,800 variants**.



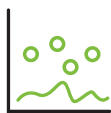
## Empower your clinical trials

NeXT Personal® offers:



### Ultra-sensitivity you can trust

Reduces false negative rates with its analytical sensitivity down to ~1 PPM (LOD50)<sup>6</sup>



### Uncompromised ultra-high specificity\*

Reduces false positive detection, powered by our proprietary NeXT SENSE\* technology



### Comprehensive insights

Uncovers and tracks driver and resistance mutations simultaneously with MRD detection in a single assay



### Broad inputs and applications

Allows you to work with a multitude of challenging samples types, including low-input samples

# Take the first step toward **partnership** with **Personalis**.



Email **info@personalis.com**



Call **1-855-436-6634** (M-F 9am–5pm PST)



Learn more at **personalis.com/products/next-personal**

<sup>1</sup>Abbosh, C., et al. Phylogenetic ctDNA analysis depicts early-stage lung cancer evolution. *Nature* 545, 446–451 (2017)

<sup>2</sup>Abbosh, C. et al. Tracking early lung cancer metastatic dissemination in TRACERx using ctDNA. *Nature* 616, 553–562 (2023)

<sup>3</sup>Black, JRM, et al. An ultra-sensitive and specific ctDNA assay provides novel pre-operative disease stratification in early stage lung cancer. ESMO annual meeting. 2023

<sup>4</sup>For evaluations across Abbosh '17, Abbosh '23, and this study, while the patients were drawn from the TRACERx cohort, the specific patients analyzed may be different, which may lead to potential differences.

<sup>5</sup>Individual assay panels were designed to target a median of 18 SNVs (range, 10-22)

<sup>6</sup>Northcott, J. et al. Analytical Validation of NeXT Personal®, an Ultra-sensitive Personalized Circulating Tumor DNA Assay. medRxiv. Preprint. January 17, 2024. <https://www.medrxiv.org/content/10.1101/2024.01.17.23299863v1>

This test is a laboratory developed test (LDT) and is performed in the CAP accredited, CLIA-certified Personalis Clinical Laboratory. The test was developed, and its performance characteristics determined by the Personalis Clinical Laboratory. It has not been cleared or approved by the United States Food and Drug Administration (FDA).

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