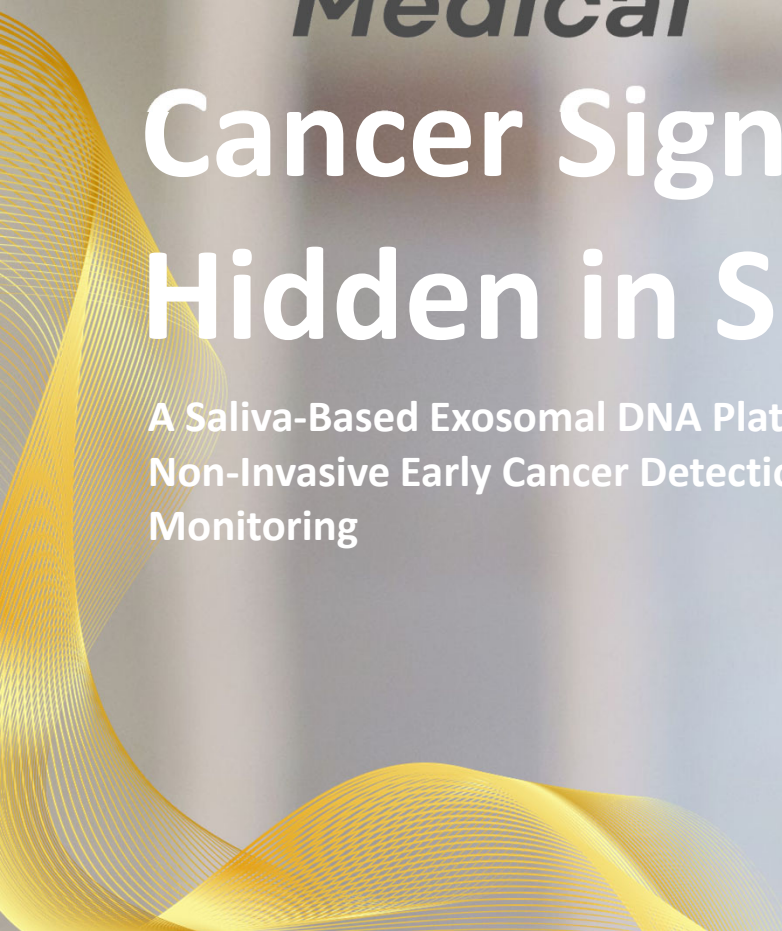




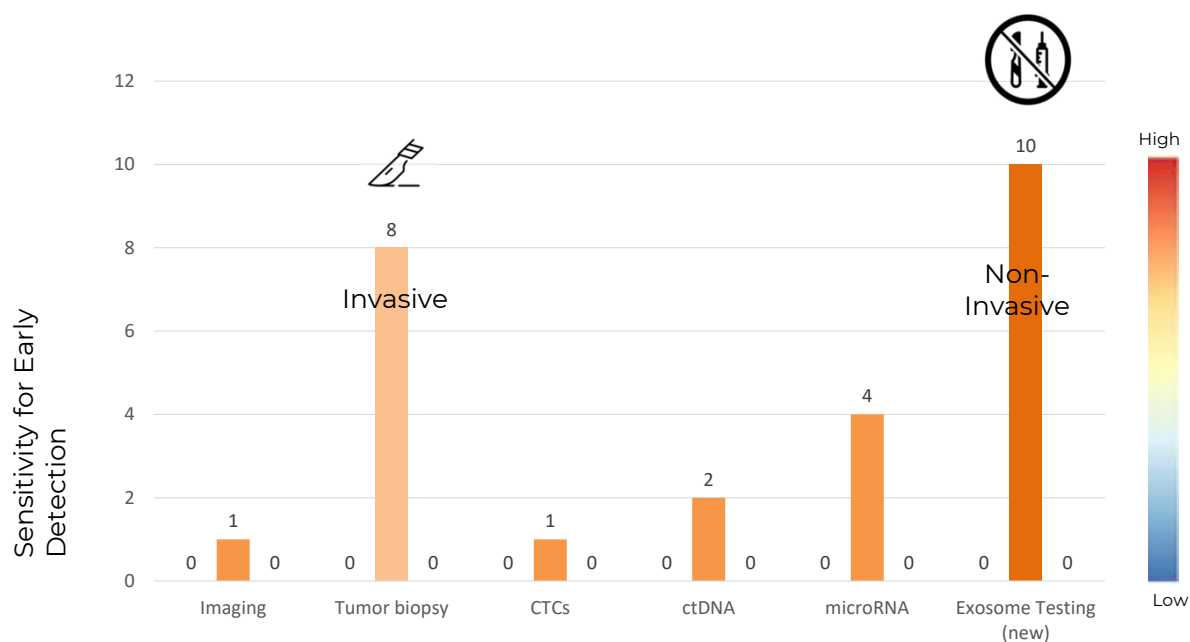
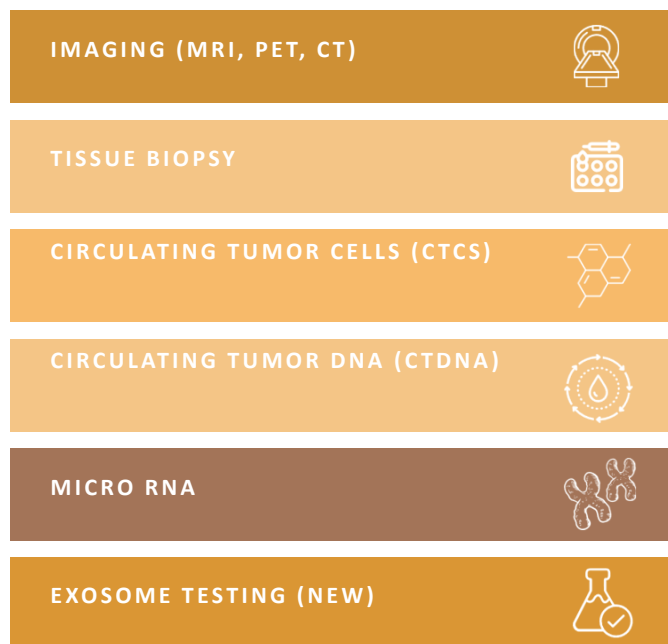
NexTel
Medical

Cancer Signals Hidden in Saliva

A Saliva-Based Exosomal DNA Platform for
Non-Invasive Early Cancer Detection &
Monitoring



The Early Detection Gap: Current Technologies vs. Early-Stage Cancer



**Current methods miss early cancers until they are at an advanced stage.
Non-invasive exosome tests bridge the gap.**

Simplest Solution in **Early Cancer Testing** **NexTel** Medical



**SALIVA TEST
KIT**



**COST
EFFECTIVE**



ACCURATE



FAST



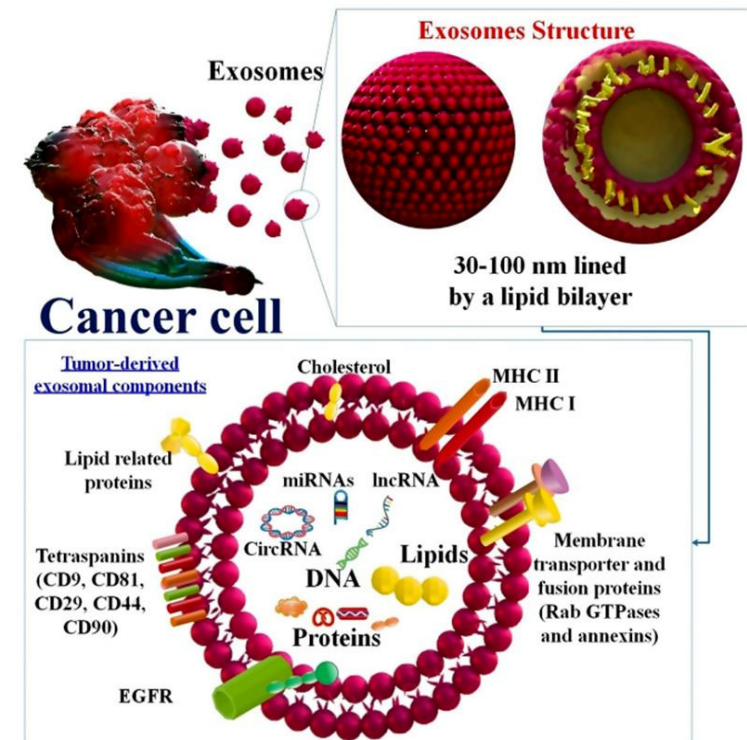
Making Worldwide Universal Early
Screening a Reality w/
Saliva-based Exosomal DNA Testing

Simple, Non-Invasive, Scalable

Saliva poised to outperform current **blood tests**

Easy Detection of Tumor-Derived **Exosomes**

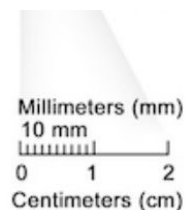
- All plant and animal cells generate exosomes
- Exosomes are the size of a virus and can easily make their way into the saliva.
- Cancer cells will produce exosomes and we have a way to detect them.



<https://cancerci.biomedcentral.com/articles/10.1186/s12935-024-03379-1>

Finding Cancer at the Cellular Stage

Detection at this level is possible using **exosomes**



**Imaging
Starts at
This Size**



1
The Ultimate Goal of Cancer Testing

2
Finding them when they are small and haven't spread.

3
Closing the early detection gap with high sensitivity testing technology

Ideal Cancer Biomarker

NexTel
Medical



Objective:

Identify exosome-associated NANOG DNA variations as diagnostic markers for cancer.



Key Findings:

- Exosomal DNA contained fragmented NANOG/NANOGP8 sequences.
- Cancer-derived exosomes showed a significantly higher frequency of a unique 22 bp insertion in NANOGP8 3'UTR.
- Distinct sequence patterns differentiate cancer from non-cancer cells.

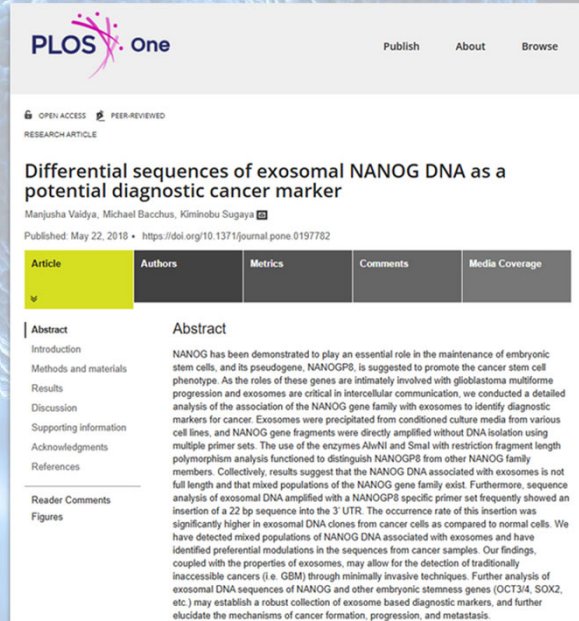


Methods:

- Exosomes isolated from cancer and normal cell lines (GBM, breast, lung, etc.).
- Direct PCR amplification of exosomal DNA
 - No complex DNA extraction needed.
 - Minimal sample prep.
 - Rapid turnaround time.
 - Cost-effective.

Implications:

- Exosomal NANOG DNA reflects cancer-specific genomic alterations.
- Demonstrates high specificity for malignant cells.
- Consistent detection across multiple cancer types.



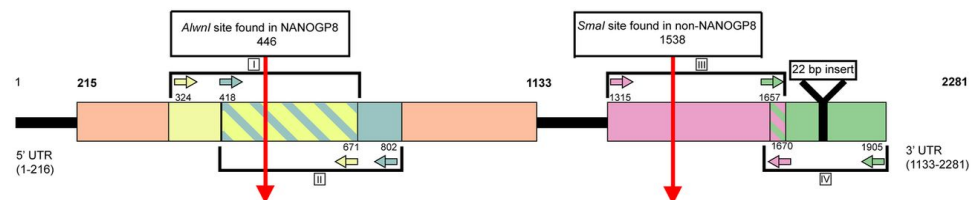
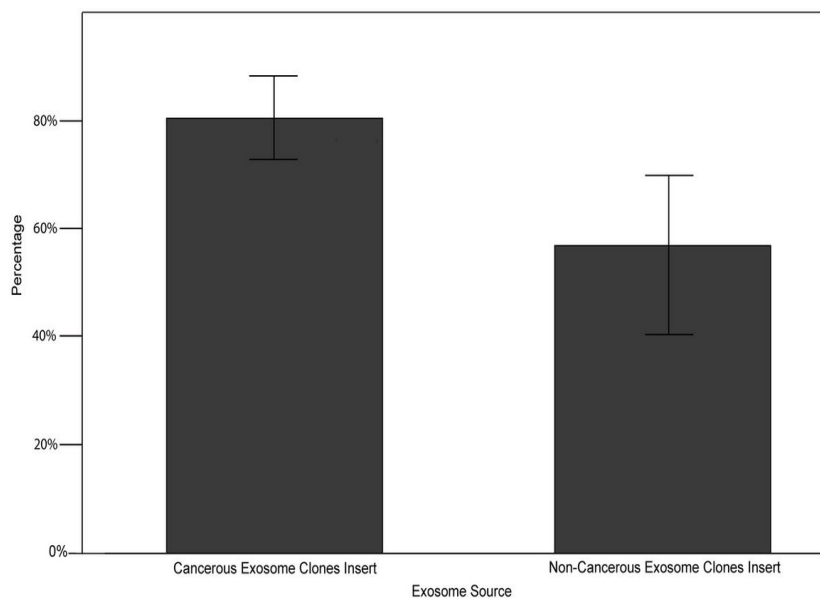
Patented Biomarker

- Exosomal NANOG DNA as a diagnostic cancer marker 16/857,067 2019

<https://cancerbiomedcentral.com/articles/10.1186/s12935-024-03464-5>

Key Findings

Frequency of 22 bp Insert into NANOGP8 3' UTR by cell type status



Primers and their locations on the NANOG/NANOGP8 gene:

- I: 324-671 : NANOGP8-AlwNI-F1/R1 (347 bp) -> (5' AAAGCTTGCCTTGCTTTGAA 3') / (5' TCTGCTGGAGGCTGAGGTAT 3')
- II: 418-802: NANOGP8-AlwNI-F2/R2 (384 bp) -> (5'-GTCTTCTGCTGAGATGCCTCACA-3') / (5'-CTTCTGCGTCACACATTGCTAT-3')
- III: 1315-1670: NANOG-SmaI-3'-UTR-F1/R1 (355 bp) -> (5'-AACCACGTGTTCTGGTTTCC-3') / (5'-GATCGAGACCATCCTGGCTA-3')
- IV: 1657-1905: NANOGP8-3'-UTR-F2/R2 (248 bp) -> (5' GGATGGTCTCGATCTCCTGA 3') / (5' CCCAATCCCAACAATACGA 3')

Exosomal DNA characteristics

- NANOG DNA is not full-length
- Mixed populations of NANOG family members detected

Cancer-Specific Patterns

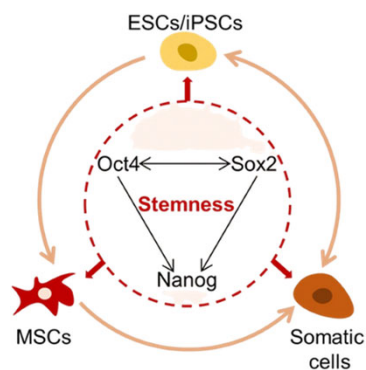
- NANOG 22 base pair sequences detected in cancer cells
- Less consistent in non-cancer exosomes

What is **NANOG**

Core **EMBRYONIC GENE** together with Oct4 and Sox2 that maintains the pluripotent state of embryonic stem cells (ESCs) which can differentiate into any cell type.

Typically, only found in humans during the **embryonic stage** of life (10 weeks) or in **Cancer Stem Cells (CSCs)**

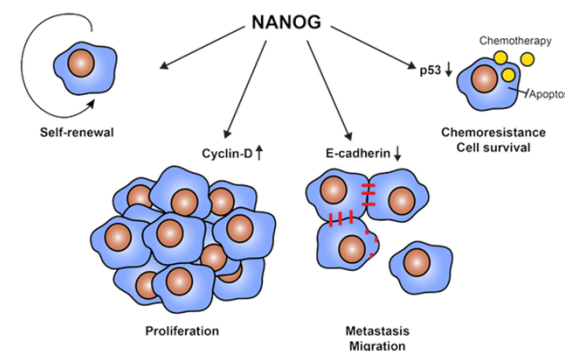
Aberrantly re-expressed in CSCs across **various tumor types**



<https://link.springer.com/article/10.1007/s12015-021-10154-6>

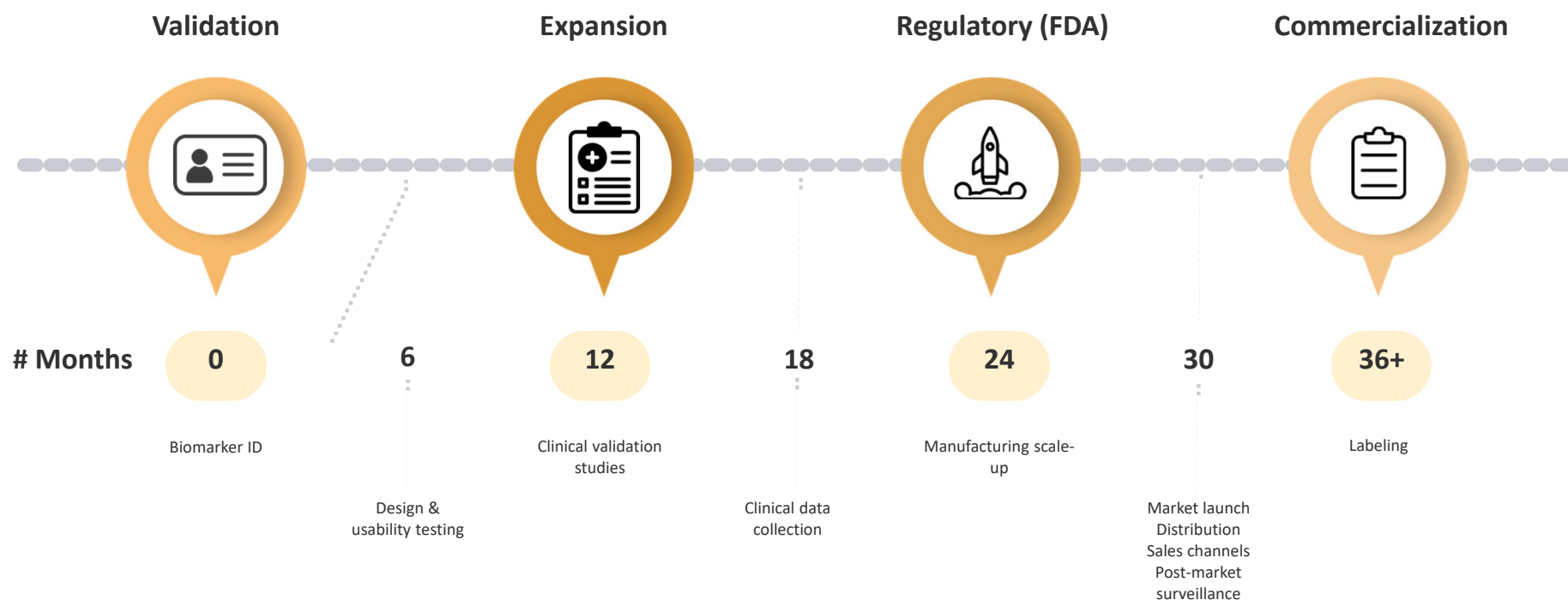
**NANOG NOT FOUND
IN HEALTHY HUMANS**

**FOUND IN:
Cancer Stem Cells**



https://www.researchgate.net/publication/325853003_Immune_Curbing_of_Cancer_Stem_Cells_by_CTLs_Directed_to_NANOG

Clinical Development Plan



\$13B+ Market Ready for Disruption

Non-Invasive Focus

100%

10%

Liquid biopsy enables minimal discomfort

Scalable platform



Broad adoption for population-wide screening & monitoring

Projected Surge

2030

33%

Rapid adoption curve expected by this year

Strong partnership potential



With diagnostics, pharma, and clinical labs

Significant unmet needs remain

 **Early-stage detection** — where intervention has the greatest impact.

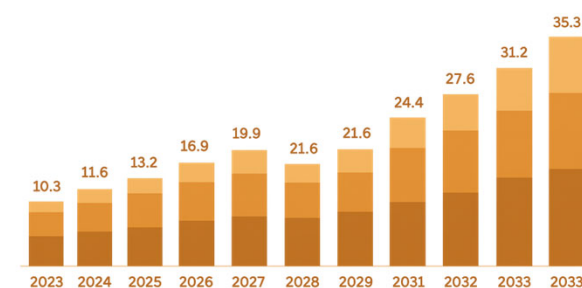
 **Monitoring recurrence** — enabling proactive, ongoing surveillance.

 **Therapy response tracking** — guiding personalized treatment decisions.

Global Liquid Biopsy Market

Size, by Product Type, 2023-2033 (USD Billion)

■ Instruments
■ Consumables Kits and Reagents
■ Software and Services



Liquid biopsy market projected to surpass **\$24B by 2030**, driven by demand for non-invasive cancer diagnostics.

<https://www.globenewswire.com/news-release/2024/01/24/2814915/0/en/Liquid-Biopsy-Market-Size-of-USD-35-3-Billion-Anticipated-by-2033-Robust-CAGR-of-13-1.html>

Collaboration or Investment Opportunity

First-in-class, saliva-based exosomal DNA diagnostic platform targeting early cancer detection.



Backed by strong preclinical proof-of-concept data demonstrating clinical feasibility.



Patent-pending proprietary technology with broad multi-cancer applicability.



Attractive near-term milestones and long-term scalability.



Seeking strategic collaboration or investment to accelerate:



- Clinical trials and multi-cancer validation
- Regulatory approvals (FDA, CE mark)
- Diagnostic kit development and manufacturing
- Commercial partnerships and global market expansion

NexTel
Medical

Thank You



Mike Sheikh



509-991-0245



msheikh@nextelmedical.com



<http://www.nextelmedical.com>

