NEO | RaDaR® ST

Detect HPV-negative head and neck cancer recurrence at the earliest stages—from adjuvant therapy through surveillance

NEO GENOMICS

Patients with head and neck squamous cell carcinoma are at risk of recurrence

85%
of HNCs
are HNSCC[1]

~1 out of 3 HNSCC cases
are HPV negative[2]

Up to 50% of patients experience
recurrence within 5 years of
initial diagnosis[1]

There is a **~40-50% chance of survival**
for patients with HPV-negative disease[3]

Survival rates, particularly in patients with locally advanced or recurrent disease, highlight the need for improved therapeutic strategies in HPV-negative HNSCC.[4]

HNC = head and neck cancer; HNSCC = head and neck squamous cell carcinoma; HPV = human papillomavirus.

Current landscape for HNSCC treatment and recurrence monitoring

Most recurrences are detected through patient-reported symptoms rather than protocols.[5]

Patient-reported symptoms have a median sensitivity of only **47.3%** for detecting recurrence[5]

Highly sensitive MRD technology can detect tumor growth before signs of clinical progression[6]

HNC = head and neck cancer; MRD = molecular residual disease.

RaDaR® ST enables personalized treatment decisions for HPV-negative HNSCC patients

Key features of RaDaR ST

Tumor-informed detection:
Using the patient's individual tumor signature, identifies trace ctDNA that may persist after treatment or surgical resection

Proven performance:
Built for confident decision-making, with detection as low as 1 ppm*

Clinical use continuum:
Detects post-surgical ctDNA and molecular recurrence, enabling earlier intervention and personalized treatment decisions

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Discover a highly sensitive, tumor-informed MRD technology that detects ctDNA fragments long before imaging shows evidence of recurrence.

*Sensitivity demonstrated across four independent analytical and clinical validation studies, with detection down to 1 ppm under study-specific conditions.[7]

ctDNA = circulating tumor DNA; HNSCC = head and neck squamous cell carcinoma; HPV = human papillomavirus; MRD = molecular residual disease; ppm = parts per million.

RaDaR ST is supported by clinical evidence

LIONESS is a critical study demonstrating the benefits of using RaDaR ST to inform treatment and identify recurrence in HPV-negative head and neck cancer.[6]

Confidence in identification of relapse:

RaDaR ST achieved 100% clinical sensitivity in detecting relapse in HPV-negative HNSCC patients. ctDNA levels as low as 5 ppm were detected during the critical surveillance window.[6]

5-month intervention advantage:

RaDaR ST detected post-surgery ctDNA indicative of relapse a median of **154 days** before clinical confirmation.[6]

Detect low-level disease:

Nearly one-third (34%) of positive samples detected by RaDaR ST would be missed by standard sensitivity assays, leaving patients to present with more advanced, harder-to-treat disease.[6]

Critical adjuvant therapy insight:

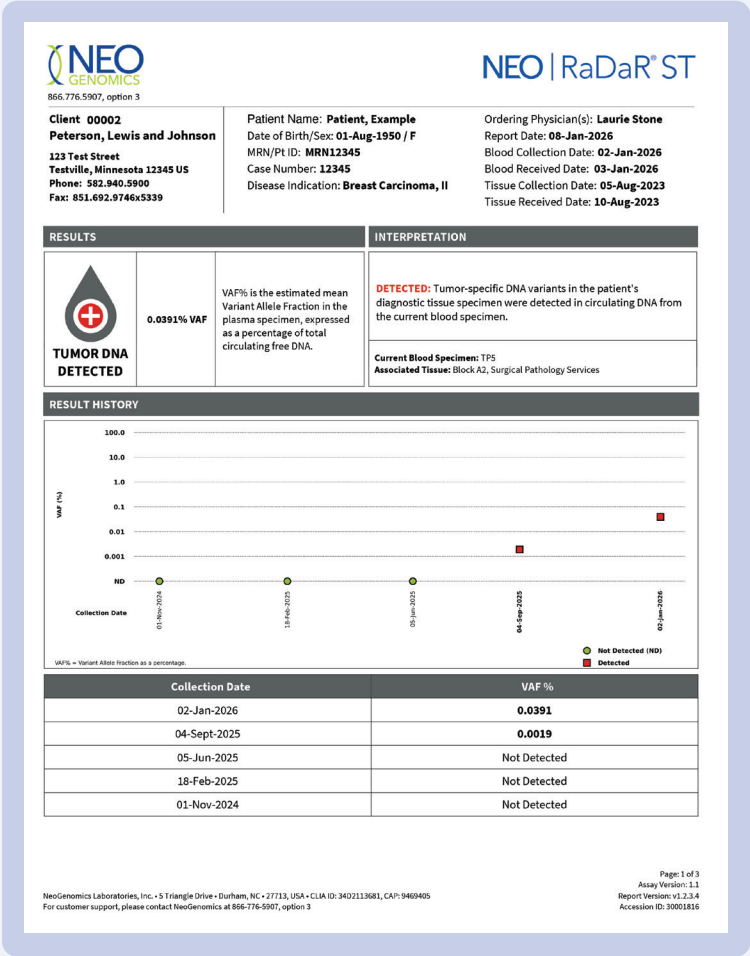
Post-surgical ctDNA detection is associated with shorter relapse-free survival compared to patients who had no ctDNA detected.[8]

Identifying postsurgical ctDNA or molecular recurrence may inform change in clinical management, before symptoms develop.[6]

ctDNA = circulating tumor DNA; HNSCC = head and neck squamous cell carcinoma; HPV = human papillomavirus; LIONESS = Liquid BIOpsy for MiNimal RESidual DiSease Detection in Head and Neck Squamous Cell Carcinoma; MRD = molecular residual disease; ppm = parts per million.

Deliver clear and actionable answers with RaDaR ST

Positive and negative results indicate two clear but distinct clinical pathways.



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NEO | RaDaR® ST

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Patient Name: **Patient, Example**
Date of Birth/Sex: **01-Aug-1950 / F**
MRN/Pt ID: **MRN12345**
Case Number: **12345**
Disease Indication: **Breast Carcinoma, II**

Ordering Physician(s): **Laurie Stone**
Report Date: **08-Jan-2026**
Blood Collection Date: **02-Jan-2026**
Blood Received Date: **03-Jan-2026**
Tissue Collection Date: **05-Aug-2023**
Tissue Received Date: **10-Aug-2023**

RESULTS

TUMOR DNA DETECTED

0.0391% VAF

VAF% is the estimated mean Variant Allele Fraction in the plasma specimen, expressed as a percentage of total circulating free DNA.

INTERPRETATION

DETECTED: Tumor-specific DNA variants in the patient's diagnostic tissue specimen were detected in circulating DNA from the current blood specimen.

Current Blood Specimen: TP5
Associated Tissue: Block A2, Surgical Pathology Services

RESULT HISTORY

VAF% = Variant Allele Fraction as a percentage.

Collection Date	VAF %
02-Jan-2026	**0.0391**
04-Sept-2025	**0.0019**
05-Jun-2025	Not Detected
18-Feb-2025	Not Detected
01-Nov-2024	Not Detected

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Report Version: v1.2.3.4
Accession ID: 30001816

Positive

ctDNA detected. Results indicate residual tumor and a higher risk of recurrence. This should prompt further discussion about treatment.

Negative

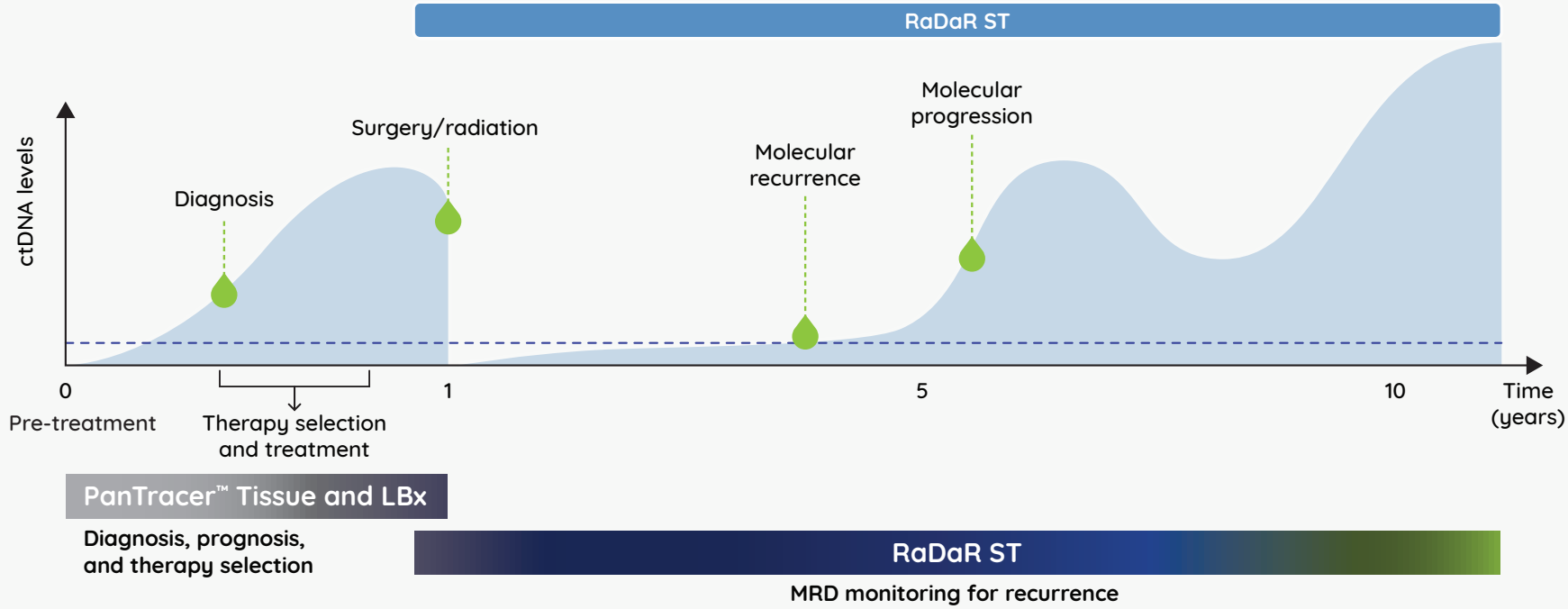
ctDNA not detected. Patient is likely cancer free, or treatment is working. Repeated tests should be carried out frequently, as this result can change.

Clear results with RaDaR ST inform the next clinical steps.

ctDNA = circulating tumor DNA.

The NEO portfolio supports HNSCC treatment across the care continuum

Broad tissue and liquid-based CGP aligned with clinical guidelines, covering key biomarkers recommended for therapy selection and additional genomic insights.



5 months

When used for surveillance, RaDaR ST can detect distant metastatic recurrence over 5 months prior to imaging.[6]

Early detection, actionable insights. Delivering tomorrow's answers today.

CGP = comprehensive genomic profiling; HNSCC = head and neck squamous cell carcinoma; MRD, molecular residual disease.

To learn more about our head and neck cancer solution or to order a test, please visit **NeoGenomics.com**.

We pride ourselves on our unparalleled Client Services team.
If you have questions regarding test information, specimen requirements, turnaround times, test add-ons, or patient results, please email us at client.services@neogenomics.com or call 866.776.5907, option 3.

References

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NeoGenomics, Inc. is a premier cancer diagnostics company specializing in cancer genetics testing and oncology data solutions. We offer one of the most comprehensive oncology-focused testing menus across the cancer continuum, serving oncologists, pathologists, hospital systems, academic centers, and pharmaceutical firms with innovative diagnostic and predictive testing to help them diagnose and treat cancer. Headquartered in Fort Myers, FL, NeoGenomics operates a network of CAP-accredited and CLIA-certified laboratories for full-service sample processing and analysis services throughout the US and a CAP-accredited full-service, sample-processing laboratory in Cambridge, England, United Kingdom.

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