Canary Oncoceutics

Precision Diagnostics, Healthier Outcomes

Empowering Personalized Cancer Therapy

Exclusive Partner for Kerala

BIOMEND Lifesciences PRIVATE LIMITED

Understanding the Challenge

The Problem: Every person's cancer is unique.

Cancer arises from DNA mutations, which vary widely between individuals.

Different Responses

As a result, cancer in each patient may respond differently to treatment, even if it originates from the same tissue type.

Standard Approach Limitations

A "Standard Approach" applies a generic treatment, but not all patients will respond to it.

The Precision Approach

The Solution: The "Precision Approach" involves using tailored treatments that target a patient's specific mutations.

- Understanding these unique mutations in cancer cells allows for personalized treatment and improved patient outcomes.

- This approach enhances treatment outcomes by moving from generic to tailored therapies.

Canary Oncocutics achieves this by using cutting-edge technologies that inform treatment decisions.

Introducing Comprehensive Genomic Profiling (CGP)

What is CGP? Genomic testing is a powerful tool to identify mutations in cancer cells.

Canary's Comprehensive Genomic Profiling (CGP) is an advanced approach that scans hundreds of genes simultaneously for a wide range of mutations.

1

Standard Tests

Single-gene or hotspot tests that may miss mutations outside of common regions

2

CGP Advantage

Offers more detailed information and a higher likelihood of identifying actionable mutations immediately

CGP can detect mutations that may be missed by single-gene or hotspot tests.

Key Benefits of Canary's CGP

Higher Chance of Finding Actionable Mutations

By analyzing hundreds of genes in a single test, it increases the chance of finding actionable mutations right away.

Enables Tailored Treatment

The analysis helps tailor treatment based on unique mutations to drive better patient outcomes.

Delivers Faster Results

It provides comprehensive and faster results by eliminating the need for sequential testing.

Conserves Tissue Sample

It consolidates all testing into a single assay, conserving the precious tissue biopsy sample and reducing the need for re-biopsy.

Unlocks New Treatment Options: It includes rare and emerging biomarkers that can open up new treatment pathways or identify innovative clinical trials.

When to Consider a CGP Test

Tissue CGP (Acuity™):

- **At Diagnosis:** To identify actionable mutations and guide treatment.
- **When Tissue is Available:** In early or advanced cancers with sufficient biopsy material.
- **For Resistance Analysis:** To identify resistance mutations after therapy progression.

ctDNA CGP (Pulse™):

- **When Biopsy is Unfeasible:** For cancers where tissue is inaccessible or insufficient.
- **To Monitor Tumor Evolution:** To non-invasively track tumor changes during or after therapy.
- **To Detect Minimal Residual Disease (MRD):** To detect recurrence post-surgery.

Portfolio Overview: Comprehensive Testing Solutions

Solid Tumor Profiling

From comprehensive 1091-gene analysis to targeted 140+ gene panels, both tissue & liquid biopsy options available

Hematological Testing

Specialized blood cancer profiling with comprehensive and focused panel options for rapid clinical decisions

Hereditary Assessment

Inherited cancer risk evaluation from comprehensive 1000-gene analysis to focused 140+ gene panels

Specialized Analysis

HRD status assessment and whole transcriptome sequencing for complete molecular profiling

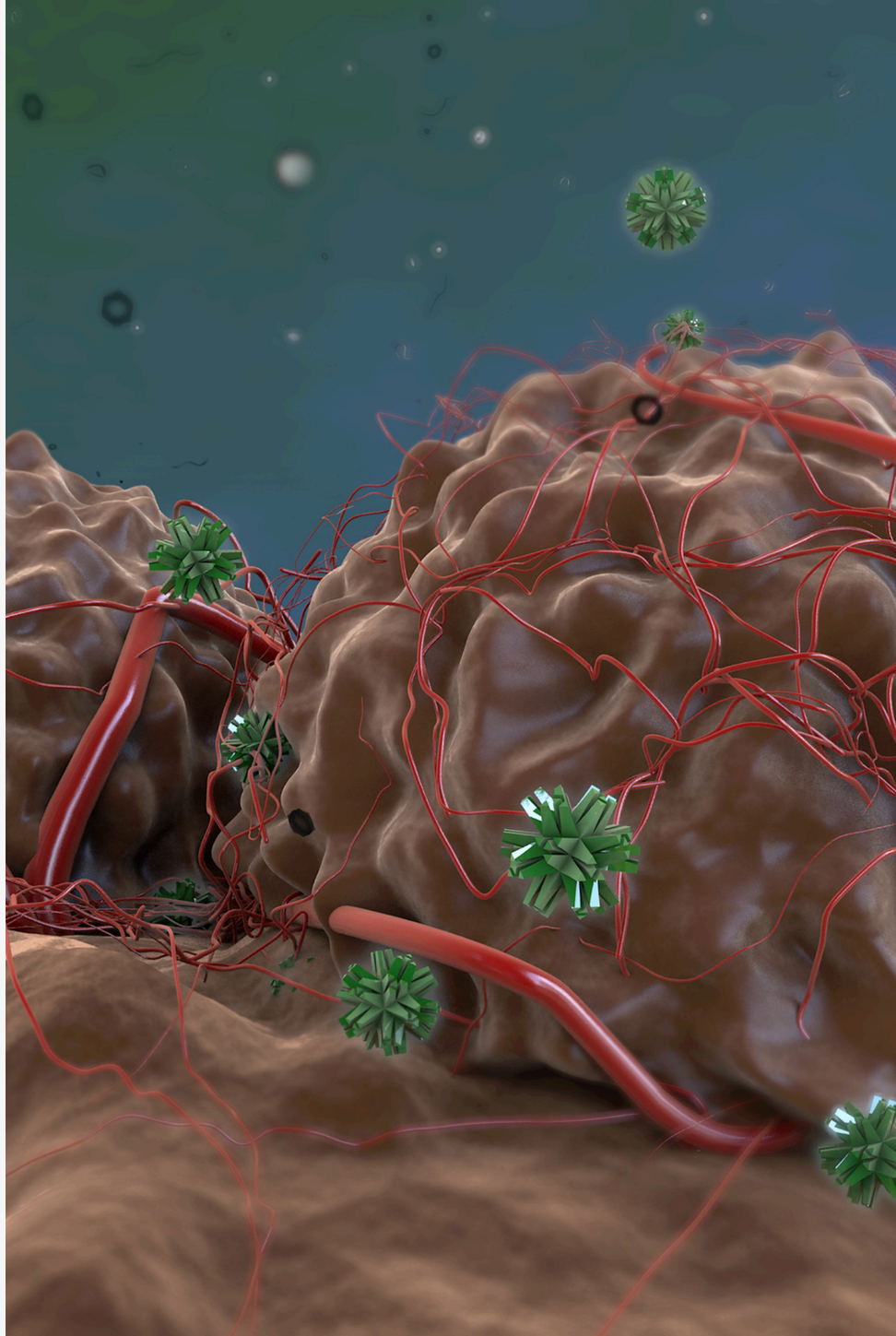
Comprehensive Gene Profiling for Solid Tumors

Acuity™ CGP

The flagship comprehensive profile for solid tumors, analyzing **1091 genes** from tissue to identify all major biomarkers (SNVs, Fusions, TMB, MSI, HRD) for targeted therapy and immunotherapy selection.

Pulse™ Liquid Biopsy

A comprehensive, non-invasive blood test analyzing **468 genes** to monitor tumor evolution, detect resistance, and guide treatment when a tissue biopsy is unavailable.



Targeted Gene Profiling for Solid Tumors

Focus™

A targeted gene panel for solid tumors analyzing **140+ key genes and MSI** from tissue, designed to provide rapid and essential insights for guiding first-line targeted therapies.

Stat™ Liquid Biopsy

A focused, non-invasive blood test analyzing **140+ key genes and MSI** for rapid treatment guidance and monitoring when a quick turnaround is critical.

Hematological Profiling Solutions

Acuity Heme™

A comprehensive genomic profile for blood cancers, analyzing over **1150 genes and markers** (including PGx, MSI, TMB, and HLA) for in-depth diagnosis, prognosis, and therapy selection.

Stat Heme™

A focused panel for blood cancers, analyzing **122 key genes** plus PGx and MSI to provide rapid, actionable insights for immediate treatment decisions.

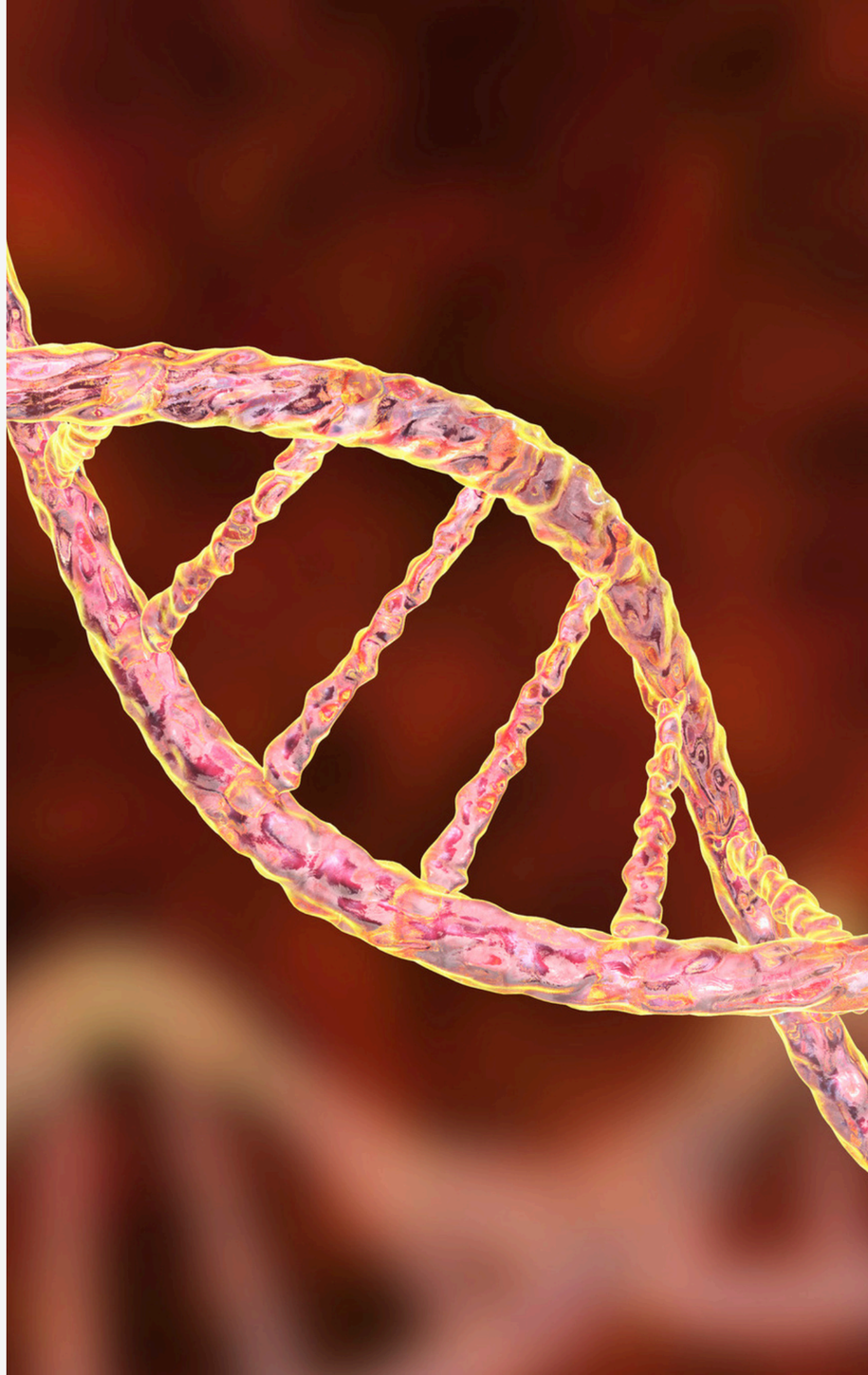
Hereditary Cancer Risk Assessment

Acuity Heredit™

A comprehensive hereditary panel analyzing **nearly 1000 genes** (including all ACMG oncology genes) plus PGx to provide a thorough assessment of inherited cancer risk and guide personalized prevention.

Stat Heredit™

A focused hereditary panel analyzing **over 140 key genes** plus PGx to rapidly assess risk for common hereditary cancers and guide urgent clinical management.



Specialized Profiling: HRD Analysis

HRD™ Panel

A specialized panel that precisely assesses **Homologous Recombination Deficiency (HRD) status** by analyzing 41 HRR genes to determine patient eligibility for PARP inhibitor therapy.

Advanced RNA Sequencing

WT™ (Whole Transcriptome)

Advanced RNA sequencing that complements DNA analysis to provide a complete molecular picture, enhancing treatment matching by detecting complex fusions, immune markers (e.g., PD-L1), and novel therapeutic targets.

The Science & Validation

>99%	>99%	0.96	100%
Sensitivity	**Specificity**	**Correlation (R)**	**Concordance**
High accuracy in detecting mutations	Precise identification with minimal false positives	High correlation with reference samples ($p < 2.2e-16$)	Perfect agreement for all variant types

Validation Data: Acuity™ showed a high correlation ($R=0.96$, $p < 2.2e-16$) with reference samples, indicating excellent analytical performance.

100% Concordance: The test demonstrated 100% concordance for SNVs, Indels, CNVs, Fusions, MSI, TMB, and HRD variants.

Commitment to Quality and Data Security

CLIA-Certified

Validating the accuracy and reliability of our genomic data analysis.

CAP Accredited

Representing the gold standard in laboratory practice for consistent, high-quality results.

HIPAA-Compliant

Guaranteeing the highest level of security and privacy for all patient data.

A Streamlined Process

01

Tumor Sample

A tissue or blood sample is sent to Canary's CLIA-certified and CAP-accredited laboratory.

02

Comprehensive Genomic Profiling

The lab uses state-of-the-art genomics technology to detect common, rare, and novel mutations.

03

Data Analysis

Canary's proprietary database analyzes the data to identify approved therapies, potential therapies, and relevant clinical trials.

04

Personalized Report

A detailed report with actionable clinical recommendations is delivered to the doctor within 14 business days of sample receipt.

Scientific Validation & Supporting Literature

1. Clinical Utility of Comprehensive Genomic Profiling

Improved Outcomes

Systematic review found CGP-guided treatment decisions improved overall survival and progression-free survival in advanced cancers.

Clinical Trial Access

Meaningful association between CGP reports and increased patient enrollment in clinical trials.

Reference: Huang, R. S. P., Lee, J. K., & Lofgren, K. T. (2025). Clinical value of comprehensive genomic profiling on clinical trial enrollment for patients with advanced solid tumors. The oncologist, 30(7), oyae293. https://doi.org/10.1093/oncolo/oyae293

INNOVATIONS JOURNALS

Review Article

Usefulness of Comprehensive Genomic Profiling in Clinical Decision-Making in Oncology: A Systematic Review

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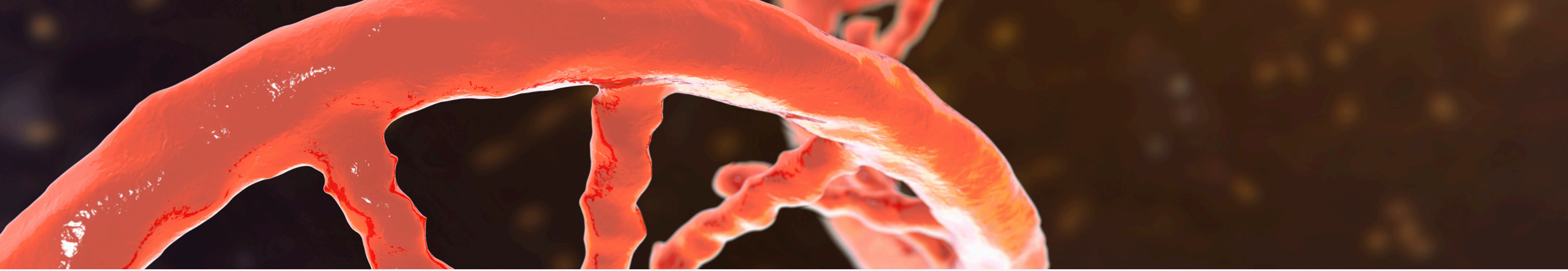
Limaye S, Deshmukh J, Rohatagi N, et al. Usefulness of comprehensive genomic profiling in clinical decision-making in oncology: a systematic review. *J Immunother Precis Oncol.* 2025; 8:55–63. DOI: 10.36401/JIPO-24-11.

Reference: Limaye, S., Deshmukh, J., Rohatagi, N., Prabhash, K., Rauthan, A., Singh, S., & Kumar, A. (2025). Usefulness of comprehensive genomic profiling in clinical decision-making in oncology: a systematic review. Journal of Immunotherapy and Precision Oncology, 8(1), 55-63.



2. RNA Sequencing for Fusion Detection

Superior Accuracy

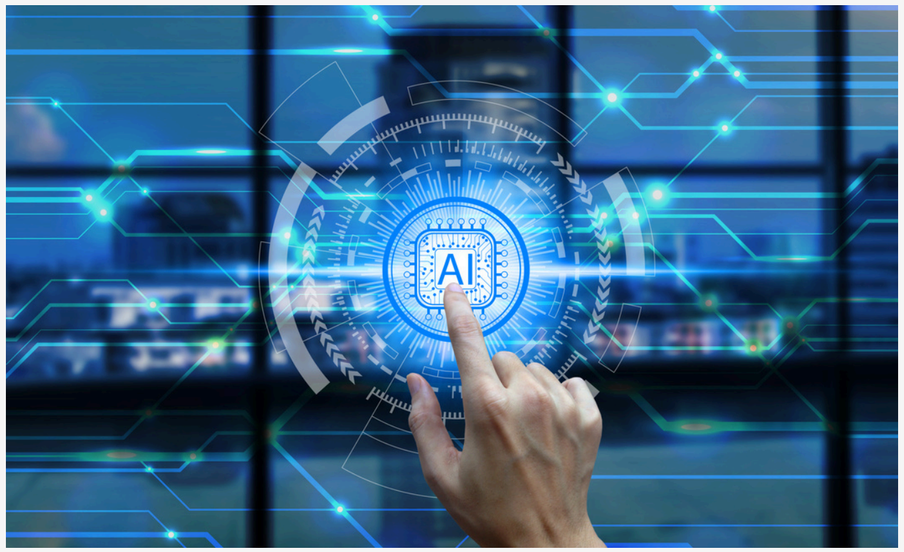
RNA-based sequencing proves more accurate and sensitive than DNA-based methods for detecting gene fusions.

Comprehensive Detection

Single assay identifies both known and novel gene fusions, providing complete tumor genetic makeup view.

> *"RNA sequencing can identify both known and novel gene fusions using a single assay, providing a more comprehensive view of the tumor's genetic makeup."*
>
> - Kim SW, Kim N, Choi YJ, Lee ST, Choi JR, Shin S. Real-World Clinical Utility of Targeted RNA Sequencing in Leukemia Diagnosis and Management. Cancers (Basel). 2024 Jul 5;16(13):2467. doi: 10.3390/cancers16132467. PMID: 39001529; PMCID: PMC11240350.

3. AI/ML Applications in Oncology



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REV

Machine Learning and AI in Cancer Prognosis, Prediction, and Treatment Selection: A Critical Approach

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Enhanced Accuracy

AI and ML demonstrate greater accuracy in predicting and analyzing cancer types than traditional methods.

Prognostic Value

AI analyzes multi-factor patient data to provide precise survival, prognosis, and disease progression information.

Diagnostic Precision

Improves cancer diagnosis accuracy through comprehensive data analysis and pattern recognition.

Reference: Zhang B, Shi H, Wang H. Machine Learning and AI in Cancer Prognosis, Prediction, and Treatment Selection: A Critical Approach. J Multidiscip Healthc. 2023 Jun 26;16:1779-1791. doi: 10.2147/JMDH.S410301. PMID: 37398894; PMCID: PMC10312208.

4. Clinical Role of Liquid Biopsy

- **Minimally Invasive Analysis**

Non-invasive method detecting cancerous tumors through circulating tumor DNA (ctDNA) and biomarkers in blood, overcoming traditional tissue biopsy limitations.

- **Treatment Monitoring**

Clinically useful for monitoring disease progression, detecting treatment resistance, and formulating tailored treatment strategies.

Reference: Mathai, R. A., Vidya, R. V. S., Reddy, B. S., Thomas, L., Udupa, K., Kolesar, J., & Rao, M. (2019). Potential Utility of Liquid Biopsy as a Diagnostic and Prognostic Tool for the Assessment of Solid Tumors: Implications in the Precision Oncology. Journal of clinical medicine, 8(3), 373. https://doi.org/10.3390/jcm8030373

Key Advantage: Captures full genetic heterogeneity that tissue biopsies may miss

Why Choose Canary?

Canary outperforms major competitors in key areas:

Metric	Canary	Competitor A	Competitor B
Number of Genes	>1000 genes	300-500 genes	300-500 genes
Turnaround Time	14 days	21-30 days	21-30 days
Cost	Significantly less	Very expensive	Very expensive
Technology	Cutting Edge	Legacy	Legacy
Predictive Potential	Unparalleled	Limited	Limited

Important Considerations

Sample Quality

Test may not be performed if sample quantity or quality is insufficient for accurate analysis.

Treatment Availability

If mutations are found, suitable therapy options or clinical trials may not be available locally.

Treatment Response

Testing cannot guarantee how the cancer will respond to recommended treatments.

Thank You

Connect with Us

Take the first step toward better health. We're here to support your journey and guide you with care, science, and personalized solutions.

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