Quest Diagnostics®

Delivering trusted breast cancer insights from screening to survivorship

Quest Diagnostics provides advanced testing and services for every stage of breast cancer care, from screening to survivorship

Screening and risk

- Hereditary breast cancer panel
- Comprehensive hereditary cancer panels
- Guideline-based hereditary cancer panels

Diagnosis

- AmeriPath® pathology services
- Comprehensive IHC and special stain services

Prognosis

- Prognostic IHC including *PD-L1, HER2, ER/PR,* and *Ki-67*

Treatment selection

- Comprehensive genomic profiling (solid and liquid)
- *DPYD* genotyping and pharmacogenomic panel

Monitoring

- Haystack MRD® ctDNA-based minimal residual disease testing for treatment response and surveillance

Note: For a comprehensive list of offerings, please visit QuestDiagnostics.com/Cancer

2.3M

The number of women globally who are diagnosed with breast cancer each year—now the most diagnosed cancer worldwide[1]

1 in 8

Women in the United States will be diagnosed with breast cancer in their lifetime[2]

17%

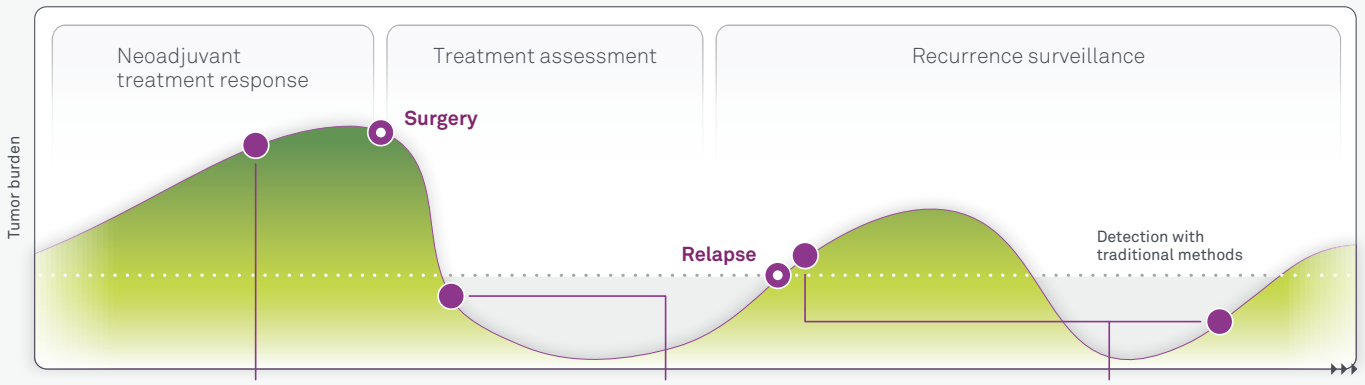
The proportion of breast cancer diagnoses identified in patients younger than 50 years old. Younger patients more often present with biologically aggressive subtypes underscoring the need for early detection[3]

In cancer care, every minute counts.
Is your diagnostic partner keeping up?

Haystack MRD® for confident residual disease detection, treatment response monitoring, and recurrence surveillance

Exceptional sensitivity with zero false positives in studies to date

Haystack MRD is an advanced, tumor-informed minimal residual disease (MRD) test purpose-built to detect ultralow levels of circulating tumor DNA (ctDNA) in blood. Originally developed by pioneers in cancer genomics at Johns Hopkins University, Haystack MRD has patented error-correction technology that enables it to identify residual or recurrent disease with exceptional accuracy, delivering confident ctDNA results for more precise, informed clinical decision-making.



Neoadjuvant therapy
Follow patient's response to neoadjuvant therapy to greater depths and with better sensitivity than traditional methods

Adjuvant therapy
Exceptional sensitivity and specificity for informed adjuvant therapy decision-making

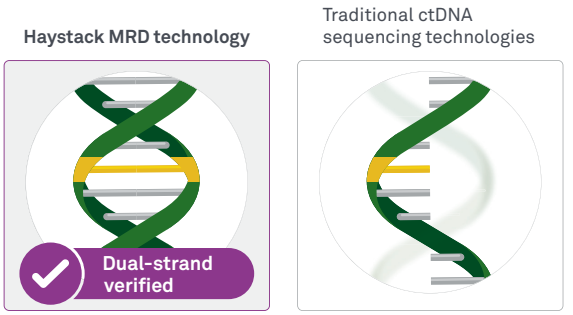
Treatment response
Limit of detection of 0.0006% means that patients with recurrence may be identified earlier than with traditional methods

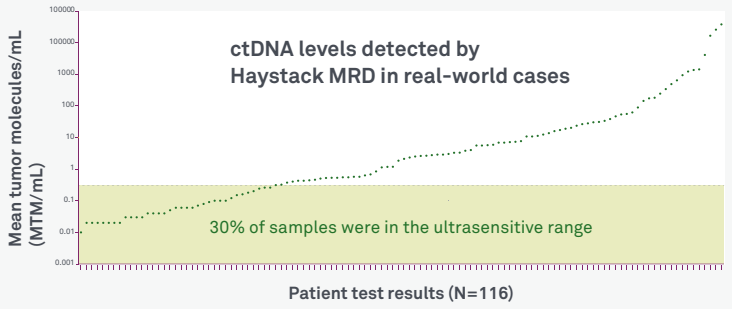
Patented error-correction technology for superb accuracy

Designed to give you the best chance of getting the right answer the first time

Dual-strand verification ensures that each variant is present on both DNA strands, essentially double-checking each variant so you can have **confidence in your MRD results.**

As a result, Haystack MRD boasts exceptional sensitivity and specificity—the assay can **detect 95% of cases at 0.0006%** tumor fraction—with no false-positive results in studies to date.





The importance of advanced ctDNA testing was shown in our Early Experience program, where 30% of Haystack MRD-positive (disease detected) cases had ctDNA levels in the ultrasensitive range. Some MRD tests might not have detected ctDNA at that level, risking delayed intervention.

Experience **the power of precision** in every diagnosis.

Quest Diagnostics®

Leadership in hereditary testing for breast cancer

We have over 40 years of genetic testing experience and strive to broaden access to hereditary cancer diagnostics, giving patients and providers the crucial data needed to assess risk and personalize treatment. Our comprehensive model removes barriers—managing everything from screening and preauthorization to testing and result delivery—creating a streamlined experience for everyone involved.

Hereditary Breast Cancer Panel

Tests for variants in **18 genes** predominantly associated with breast, prostate, and other tissue cancers.

Genes included										
ATM	*BARD1*	*BRCA1*	*BRCA2*	*CHEK2*	*CDH1*	*EPCAM*	*MLH1*	*MSH2*	*MSH6*	*NF1*
PALB2	*PMS2*	*PTEN*	*RAD51C*	*RAD51D*	*STK11*	*TP53*				

Quest Diagnostics also offers broader panels focused on supporting hereditary cancer testing:

The **Guideline-Based Hereditary Cancer Panel** covers 32 genes that provide clinically actionable results for moderate- to high-risk cancers, as defined by the guidelines.[a]

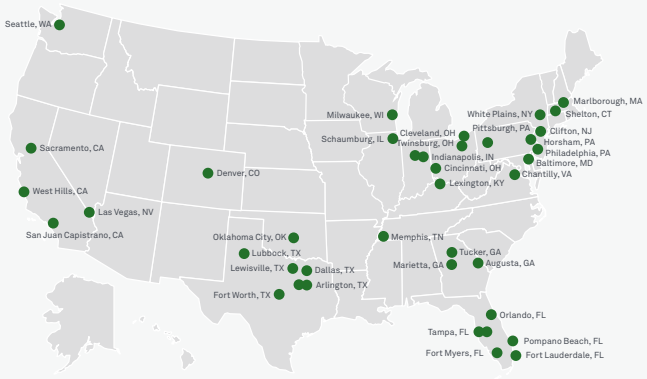
The **Comprehensive Hereditary Cancer Panel** covers 66 genes, including emerging genes, to provide deeper genetic insights regarding patient care.[b]

[a] The full list of genes available can be found online at QuestDiagnostics.com/GuidelineHereditaryPanel.
[b] The full list of genes available can be found online at QuestDiagnostics.com/ComprehensiveHereditaryPanel.

Comprehensive breast pathology expertise

We are a leading provider of anatomic pathology services in the United States. Quest and AmeriPath® laboratories across the country provide pathology solutions supported by fellowship-trained subspecialty pathologists who understand breast pathology. Our labs produce high-quality slides with quick turnaround times to support your patient's care.

- Network of over **400 board-certified pathologists** nationwide
- Extensive range of **fellowship training** across a range of subspecialties, including breast
- **20+ facilities** across the country to service all 50 states



- **Unmatched expertise** in anatomic and digital pathology
- **Comprehensive menu** of immunohistochemical (IHC), companion diagnostic, and special stains

Experience **the complete spectrum of diagnostic support** from routine to specialized testing.

Leveraging key tests for prognosis and treatment selection for breast cancer

The promise of precision oncology is to strive for the right treatment for the right patient at the right time. Leverage a comprehensive portfolio of solutions to gain greater insight into the next steps for your breast cancer patient.

PD-L1

PD-L1 is a protein that protects normal cells from destruction when T cells are activated. Some cancer cells take advantage of this protective role by highly expressing PD-L1 to evade the immune system. We offer various PD-L1 clones that can inform treatment selection.

HER2

The *HER2* (also known as *ERBB2* or *HER-2/neu*) protooncogene encodes a tyrosine kinase receptor that is a member of the epidermal growth factor receptor (EGFR) family. *HER2* status can be assessed by detecting either protein overexpression with immunohistochemistry (IHC) or gene amplification with in situ hybridization (ISH). *HER2* status determines patient eligibility for *HER2*-targeted therapy.

Estrogen and progesterone receptor (ER/PR)

Estrogen and progesterone receptor assays are routinely performed on breast carcinomas to assess responsiveness to endocrine therapy and prognosis.

Ki-67

In breast cancer development, the expression of Ki-67 (also known as MIB-1) is strongly associated with cancer proliferation and is a known predictor of prognosis and outcome.

Experience commitment that extends
beyond supporting an accurate diagnosis.

Comprehensive genomic profiling for treatment selection

Solid TumorSEQ™

- Includes assessment of 523 genes[c] from DNA and 55 genes from RNA that are associated with a broad range of solid tumors
- Assesses single nucleotide variants (SNVs), copy number variants (CNVs), fusions, and splice variants along with genomic signatures, microsatellite instability (MSI), and tumor mutational burden (TMB)
- This panel contains clinically actionable genes as well as emerging genes
- Key breast cancer biomarkers included in our comprehensive genomic profiling: *BRCA1, BRCA 2, ERBB2, ESR1, PALB2, PIK3CA*

LiquidSEQ™ Liquid Biopsy

- LiquidSEQ provides a comprehensive molecular profile—including 523 genes[d] associated with a broad spectrum of solid tumor cancers—that assesses the cell-free DNA (cfDNA) for SNVs, CNVs, and fusions along with genomic signatures, MSI, and TMB
- This panel would be used for comprehensive analysis of a patient's genetic profile from a blood sample in the event tissue is not available or is insufficient

LiquidSEQ Liquid Biopsy reflex to Solid TumorSEQ

When there are no tissue results or more limited tissue testing results, liquid comprehensive genomic profiling with LiquidSEQ can increase the number of patients found to be positive for cancer biomarkers. Reflex to Solid Tumor SEQ provides a complimentary method to assess biomarker measurement in cases where measurable ctDNA may be difficult to detect, and where there is sufficient tissue available.

[c] The full list of genes available can be found online at QuestDiagnostics.com/SolidTumorSEQ.
[d] The full list of genes available can be found online at QuestDiagnostics.com/LiquidSEQ.

Assess pharmacogenomic markers to gain greater treatment insight

Genetics can play a significant role in the selection of certain medications. For instance, individuals may metabolize medications too quickly or too slowly. The pharmacogenomics panel analyzes genes of known pharmacogenomic value, allowing clinicians to gain valuable insight into an individual's response to, and adverse effects from, medications with known gene-drug interactions.

Pharmacogenomics panel

Quest Diagnostics offers a broad Pharmacogenomics Panel that analyzes genes of known pharmacogenomic value.

DPYD gene testing

Genetic variations in the *DPYD* gene can reduce or abolish DPD enzyme activity. Individuals with decreased DPD activity are at risk for severe or even fatal adverse reactions if they are administered standard doses of pyrimidine-based chemotherapeutic agents.

Genes included										
ABCG2	*CYP2B6*	*CYP2C9*	*CYP2C19*	*CYP2D6*	*CYP3A4*	*CYP3A5*	*CYP4F2*	*DPYD*	*F5*	*HLA-A**31:01
*HLA-B**15:02	*HLA-B**57:01	*HLA-B**58:01	*IFNL3*	*NAT2*	*NUDT15*	*SLCO1B1*	*TPMT*	*UGT1A1*	*VKORC1*	

Experience **the efficiency of working with a single lab** to improve the quality and speed of cancer care.

Go beyond the test to operationalize your precision oncology vision

Broad coverage for enhanced access

We're in-network for more than 90% of lives nationwide and have preferred lab network status with major health plans, enabling us to deliver pricing at the time of service for patients, preventing surprise bills.

We make it easy for patients to verify coverage with our health plan lookup tool at **Insurance.QuestDiagnostics.com.**

Advanced testing that's affordable

We offer a **flexible and easy-to-use patient access program** for those who may need help with advanced testing. Our goal is to ensure every patient has a solution that fits their financial circumstances.

Through our robust **Patient Access Program**, we can tailor payment plans or financial assistance for uninsured or underinsured patients.

Convenient testing locations

Patients can get tested when and where it's most convenient for them, and in-office phlebotomists are available from Quest to support your practice.

There are approximately **2,400 Patient Service Centers nationwide**, and online scheduling and results delivery available from the free **MyQuest® app.**

Service excellence

Contact the dedicated Oncology Service Excellence Team hotline (1.833.710.0351) for common account support needs, including account updates, billing questions, test results, and information.

Experience the power of Quest.
Visit QuestDiagnostics.com/Cancer to learn more.

References

1. Arnold M, Morgan E, Rumgay H, et al. Current and future burden of breast cancer: Global statistics for 2020 and 2040. *Breast*. 2022;66:15-23. doi:10.1016/j.breast.2022.08.010
2. National Breast Cancer Foundation. Breast cancer stats & facts. Updated June 17, 2026. Accessed June 19, 2026. https://www.nationalbreastcancer.org/breast-cancer-facts/
3. Siegel RL, Kratzer TB, Wagle NS, et al. Cancer statistics, 2026. *CA Cancer J Clin*. 2026;76(1)e70043. doi:10.3322/caac.70043

Test codes may vary by location. Please contact your local laboratory for more information.

Image content features models and is intended for illustrative purposes only.

QuestDiagnostics.com

Quest®, Quest Diagnostics®, any associated logos, and all associated Quest Diagnostics registered or unregistered trademarks are the property of Quest Diagnostics. All third-party marks—® and ™—are the property of their respective owners. © 2026 Quest Diagnostics Incorporated. All rights reserved. SB15227 8/2026