BIOPHARMA SERVICES

Labcorp® Plasma Detect™

Evaluate response to treatment and detect disease recurrence with a tumor-informed ctDNA molecular residual disease assay that identifies patient-specific mutations using integrated whole genome sequencing and machine learning analysis

A promising biomarker to accelerate oncology therapeutic development for solid tumors in clinical trials

Circulating tumor DNA (ctDNA) has been established as an important analyte for liquid biopsies and is commonly used to assess the mutational landscape of cancer patients with advanced or metastatic disease in order to guide personalized therapeutic selection. ctDNA analyses have also been employed to evaluate therapeutic response and have shown prognostic value across several clinical settings.[1] Specifically, ctDNA analyses have recently been used in early-stage solid tumor malignancies to identify molecular residual disease (MRD) after curative intent intervention to detect cancer recurrence earlier than standard imaging or survival-based endpoints. The adoption of ctDNA MRD assessment in clinical trials for patient selection/stratification, response assessment, and as a potential early endpoint promises to improve the efficiency of trials leading to the accelerated development and approval of new therapies (Figure 1).[2]

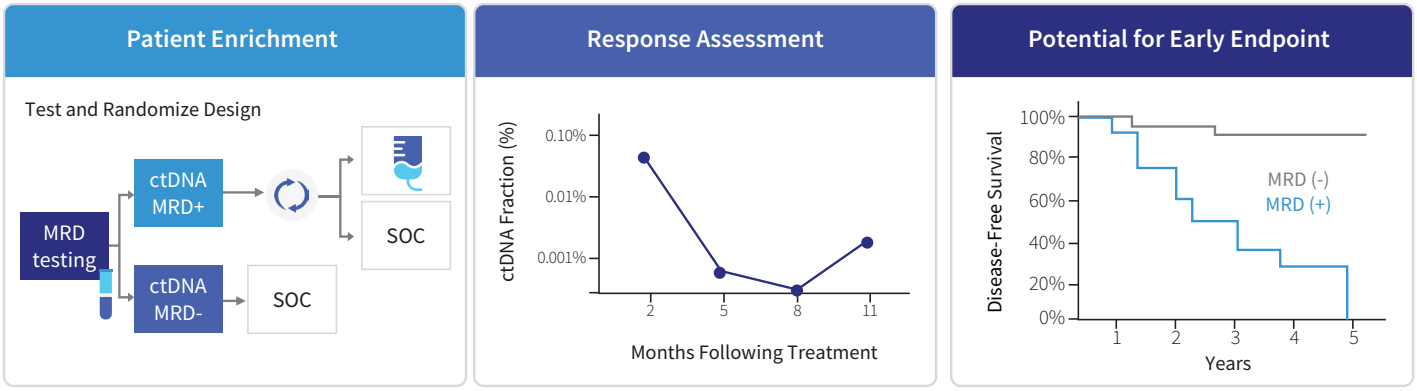

FIGURE 1. Labcorp Plasma Detect ctDNA MRD Analyses to Accelerate Drug Development Opportunities n clinical trials

Modified from Kasi et al[2]

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LABCORP PLASMA DETECT

A sensitive, rapid and scalable tumor-informed ctDNA MRD assay

Labcorp Plasma Detect is a ctDNA MRD assay designed to support therapeutic development applications. Using a tumor-informed approach, the Labcorp Plasma Detect assay incorporates whole-genome sequencing (WGS) and advanced machine learning[3] to identify and track thousands of single nucleotide variants (SNVs) over time. The result is an efficient time-to-report workflow that enables market competitive sensitivity without the need for bespoke panels and ultra-deep sequencing (Figure 2).

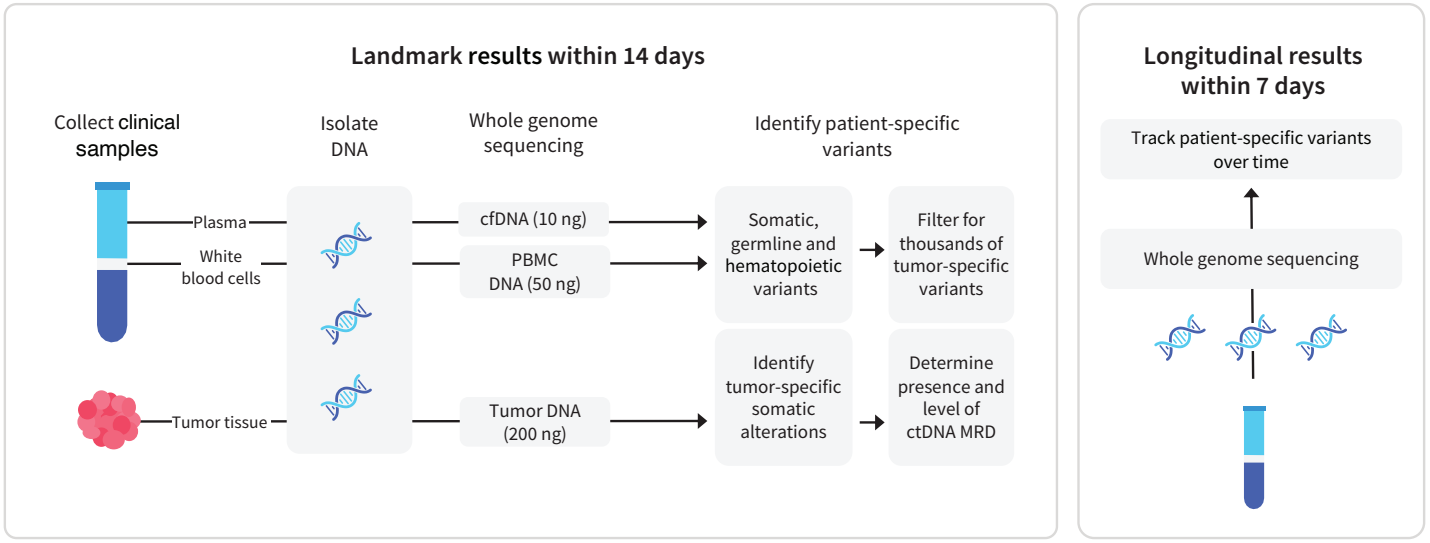

Figure 2. Labcorp Plasma Detect tumor-informed workflow. The tumor-informed testing workflow comprises a tumor-informed landmark MRD assessment using DNA from plasma and paired peripheral bone marrow cells (PBMCs) and tumor tissue to identify thousands of high-confidence, tumor-specific variants for detection of ctDNA MRD, followed by longitudinal sampling of plasma to detect and quantify ctDNA MRD over time.

HIGH SENSITIVITY

Assess MRD with high analytical sensitivity 0.005% ctDNA content and specificity (99.4%)[4]

RAPID

Landmark time point results in as few as 14 days
Longitudinal results in as few as 7 days

SCALABLE

Standardized workflow, no bespoke chemistry required

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WHY LABCORP

One partner to achieve your next cancer breakthrough

At Labcorp, we provide industry-leading biopharma services and solutions to help you discover, develop and deliver life-changing therapies that increase the potential to save the lives of people around the world. Built on a reputation for scientific and technical excellence and an unmatched global network, we can support you at every stage of the cancer research continuum.

- **Deep Scientific Knowledge and Experience:** Access comprehensive and specialized oncology capabilities with our integrated medical, scientific, regulatory and bioinformatics teams.
- **Development Acceleration:** Reduce development time and risk with end-to-end support from discovery through commercialization.
- **Data-Driven Insights:** Optimize biomarker-driven development with unparalleled data and real-world evidence.
- **Global Laboratory Network:** Ensure day-one readiness with global drug and diagnostic co-development and test commercialization capabilities.

Partnered with biopharma on 10 of 16 oncology drugs approved by the FDA in 2022

Supported CDx development for PD-L1, HER-2, KRAS, EGFR, BRAF, ALK and more

Experience supporting clinical trial testing for more than 2,000 trials across various tumor types

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References

1. Nikanjam M, Kato S, Kurzrock R. Liquid biopsy: current technology and clinical applications. *J Hematol Oncol*. 2022;15:131. doi:10.1186/s13045-022-01351-y
2. Kasi PM, Fehringer G, Taniguchi H, et al. Impact of circulating tumor DNA-based detection of molecular residual disease on the conduct and design of clinical trials for solid tumors [published correction appears in *JCO Precis Oncol*. 2022 Apr;6:e2200193]. *JCO Precis Oncol*. 2022;6:e2100181. doi:10.1200/PO.21.00181
3. Wood DE, White JR, Georgiadis A, et al. A machine learning approach for somatic mutation discovery. *Sci. Transl. Med*. 2018;10(457):eaar7939. doi:10.1126/scitranslmed.aar7939
4. Data on file

Contact us

Contact our biopharma team to see how we can help you accelerate your precision oncology program.

Learn more at **www.oncology.labcorp.com/biopharma-partners**

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