+357 96 030922
info@marketpublishers.com

Minimal Residual Disease (MRD) Liquid Biopsy Market Forecasts to 2034 – Global Analysis By Product (NGS-Based MRD Assays, PCR-Based MRD Assays, Digital PCR MRD Tests, Cell-Free DNA MRD Tests, Other Products), By Cancer Type, By Sample Type, By Technology, By End User and By Geography

https://marketpublishers.com/r/MF895D4371ACEN.html
Date: March 2026
Pages: 200
Price: US$ 4,150.00 (Single User License)
ID: MF895D4371ACEN

Abstracts

According to Stratistics MRC, the Global Minimal Residual Disease (MRD) Liquid Biopsy Market is accounted for $1.9 billion in 2026 and is expected to reach $4.7 billion by 2034 growing at a CAGR of 12% during the forecast period. Minimal Residual Disease (MRD) Liquid Biopsy refers to highly sensitive diagnostic tests that detect small numbers of remaining cancer cells in a patient's body after treatment. These tests analyze circulating tumor DNA (ctDNA), circulating tumor cells, or other biomarkers in blood samples to identify early signs of relapse. MRD detection allows clinicians to monitor treatment effectiveness, adjust therapies, and detect recurrence earlier than conventional imaging methods. As a non-invasive diagnostic tool, MRD liquid biopsy supports personalized oncology care, enabling more precise disease monitoring and improved long-term cancer management.

Market Dynamics:

Driver:

Increasing cancer prevalence worldwide

As cancer incidence continues to rise, there is a growing need for advanced diagnostic tools that can detect disease recurrence at very early stages. MRD liquid biopsy

+357 96 030922
info@marketpublishers.com

technologies enable the detection of small amounts of cancer cells remaining in the body after treatment. These tests provide a non-invasive and highly sensitive method for monitoring treatment response and disease progression. Healthcare providers are increasingly adopting MRD testing to improve patient outcomes through early intervention. As oncology diagnostics evolve, the demand for MRD liquid biopsy solutions is expected to grow significantly.

Restraint:

Limited clinical validation in some cancers

Although MRD testing has demonstrated strong clinical utility in hematological malignancies such as leukemia, its effectiveness in some solid tumors is still under investigation. The lack of standardized testing protocols and validation studies across multiple cancer types can limit broader clinical adoption. Healthcare providers often require strong clinical evidence before incorporating new diagnostic technologies into routine practice. Additionally, regulatory approvals can be delayed when sufficient clinical data is unavailable. These challenges may slow the widespread implementation of MRD liquid biopsy technologies.

Opportunity:

Integration with precision medicine approaches

Precision medicine focuses on tailoring treatments based on a patient’s genetic and molecular profile. MRD testing provides valuable molecular insights that help clinicians determine treatment effectiveness and identify potential relapse. This information can guide personalized treatment decisions and targeted therapy selection. Pharmaceutical companies are also incorporating MRD biomarkers into clinical trials to evaluate the effectiveness of new cancer therapies. As personalized oncology continues to expand, the role of MRD liquid biopsy technologies in precision medicine is expected to increase substantially.

Threat:

Competition from traditional biopsy methods

Conventional tissue biopsies remain widely used for cancer diagnosis and monitoring. Many healthcare providers still rely on established biopsy techniques due to their long

+357 96 030922
info@marketpublishers.com

history of clinical validation. In some cases, tissue biopsies provide more detailed information about tumor structure and characteristics. Additionally, the cost and availability of MRD liquid biopsy tests may limit their adoption in certain healthcare settings. These factors create competitive pressure on the adoption of liquid biopsy technologies in oncology diagnostics.

Covid-19 Impact:

The COVID-19 pandemic had a notable impact on the Minimal Residual Disease Liquid Biopsy market. During the early stages of the pandemic, many cancer screening and diagnostic procedures were delayed due to healthcare system disruptions. Clinical trials related to oncology diagnostics also experienced temporary slowdowns. However, the pandemic increased interest in non-invasive diagnostic technologies that reduce hospital visits and patient exposure to infections. MRD liquid biopsy tests, which require simple blood samples, gained attention as a safer and more convenient monitoring tool. As healthcare systems recovered, investments in advanced cancer diagnostics resumed.

The leukemia segment is expected to be the largest during the forecast period

The leukemia segment is expected to account for the largest market share during the forecast period as MRD testing has shown strong clinical effectiveness in hematological cancers. Leukemia patients often require continuous monitoring after treatment to detect possible disease relapse. MRD liquid biopsy techniques allow clinicians to identify minimal cancer cells that remain in the bloodstream after therapy. Early detection of residual disease enables timely treatment adjustments and improved patient outcomes. Healthcare providers increasingly rely on MRD testing for risk stratification and treatment planning in leukemia cases.

The pharmaceutical companies segment is expected to have the highest CAGR during the forecast period

Over the forecast period, the pharmaceutical companies segment is predicted to witness the highest growth rate due to increasing use of MRD biomarkers in drug development and clinical trials. Pharmaceutical firms are utilizing MRD testing to evaluate the effectiveness of novel cancer therapies. MRD data can help accelerate clinical trial outcomes by providing early indicators of treatment response. The growing focus on targeted therapies and immunotherapies is further increasing the importance of molecular diagnostics. Collaborations between diagnostic companies and

+357 96 030922
info@marketpublishers.com

pharmaceutical manufacturers are also expanding in this area.

Region with largest share:

During the forecast period, the North America region is expected to hold the largest market share owing to strong research infrastructure and advanced healthcare systems. The region has a high adoption rate of innovative diagnostic technologies in oncology care. Leading biotechnology companies and diagnostic laboratories are actively developing MRD liquid biopsy solutions in this region. Government funding and regulatory support for cancer research also contribute to market growth. Additionally, the rising prevalence of cancer and growing awareness of precision medicine further support the adoption of MRD diagnostics.

Region with highest CAGR:

Over the forecast period, the Asia Pacific region is anticipated to exhibit the highest CAGR driven by increasing cancer incidence and expanding healthcare infrastructure. Countries such as China, Japan, South Korea, and India are investing heavily in advanced cancer diagnostics and research programs. The growing adoption of molecular diagnostic technologies is improving cancer detection and monitoring capabilities in the region. Additionally, rising healthcare expenditure and government initiatives supporting precision medicine are encouraging market expansion. International collaborations and clinical research activities are also increasing across Asia Pacific.

Key players in the market

Some of the key players in Minimal Residual Disease (MRD) Liquid Biopsy Market include Natera, Inc., F. Hoffmann-La Roche Ltd., Guardant Health, Inc., Adaptive Biotechnologies Corporation, IQVIA Holdings Inc., Illumina, Inc., Thermo Fisher Scientific Inc., Invitae Corporation, Agilent Technologies, Inc., Bio-Rad Laboratories, Inc., ArcherDx, Inc., NeoGenomics Laboratories, Exact Sciences Corporation, GRAIL, LLC and BGI Genomics.

Key Developments:

In January 2026, Natera and Exelixis announced a collaboration on the STELLAR-316 trial, a randomized Phase 3 study that will use Natera’s Signatera test to identify MRD-positive patients with resected Stage II/III colorectal cancer for evaluation of the drug

+357 96 030922
info@marketpublishers.com

zanzalintinib.

In April 2025, Guardant Health announced an agreement with Bayshore HealthCare to offer its precision oncology tests through Bayshore's network of clinics in Canada . This partnership will provide Canadian patients with access to the Guardant Reveal™ blood test for MRD detection and recurrence monitoring in early-stage cancer.

Products Covered:

- NGS-Based MRD Assays
- PCR-Based MRD Assays
- Digital PCR MRD Tests
- Cell-Free DNA MRD Tests
- Other Products

Cancer Types Covered:

- Hematological Malignancies
- Leukemia
- Lymphoma
- Multiple Myeloma
- Solid Tumors
- Other Cancer Types

Sample Types Covered:

- Blood

+357 96 030922
info@marketpublishers.com

- Bone Marrow
- Plasma
- Serum
- Other Sample Types

Technologies Covered:

- Next-Generation Sequencing (NGS)
- Real-Time PCR
- Digital Droplet PCR
- BEAMing Technology
- Flow Cytometry
- Other Technologies

End Users Covered:

- Hospitals
- Oncology Clinics
- Diagnostic Laboratories
- Academic & Research Institutes
- Pharmaceutical Companies
- Other End Users

+357 96 030922
info@marketpublishers.com

Regions Covered:

- North America
  - United States
  - Canada
  - Mexico
- Europe
  - United Kingdom
  - Germany
  - France
  - Italy
  - Spain
  - Netherlands
  - Belgium
  - Sweden
  - Switzerland
  - Poland
  - Rest of Europe
- Asia Pacific
  - China
  - Japan

+357 96 030922
info@marketpublishers.com

- India
- South Korea
- Australia
- Indonesia
- Thailand
- Malaysia
- Singapore
- Vietnam
- Rest of Asia Pacific

South America

- Brazil
- Argentina
- Colombia
- Chile
- Peru
- Rest of South America

Rest of the World (RoW)

- Middle East
  - Saudi Arabia

+357 96 030922
info@marketpublishers.com

United Arab Emirates

Qatar

Israel

Rest of Middle East

Africa

South Africa

Egypt

Morocco

Rest of Africa

What our report offers:
- Market share assessments for the regional and country-level segments
- Strategic recommendations for the new entrants
- Covers Market data for the years 2023, 2024, 2025, 2026, 2027, 2028, 2030, 2032 and 2034
- Market Trends (Drivers, Constraints, Opportunities, Threats, Challenges, Investment Opportunities, and recommendations)
- Strategic recommendations in key business segments based on the market estimations
- Competitive landscaping mapping the key common trends
- Company profiling with detailed strategies, financials, and recent developments
- Supply chain trends mapping the latest technological advancements

Free Customization Offerings:

All the customers of this report will be entitled to receive one of the following free customization options:

Company Profiling

+357 96 030922
info@marketpublishers.com

Comprehensive profiling of additional market players (up to 3)

SWOT Analysis of key players (up to 3)

Regional Segmentation

Market estimations, Forecasts and CAGR of any prominent country as per the client's interest (Note: Depends on feasibility check)

Competitive Benchmarking

Benchmarking of key players based on product portfolio, geographical presence, and strategic alliances

+357 96 030922
info@marketpublishers.com

Contents

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

13 COMPANY PROFILES

+357 96 030922
info@marketpublishers.com

List Of Tables

LIST OF TABLES

+357 96 030922
info@marketpublishers.com

Note: Tables for North America, Europe, APAC, South America, and Rest of the World (RoW) are also represented in the same manner as above.

+357 96 030922
info@marketpublishers.com

I would like to order

Product name: Minimal Residual Disease (MRD) Liquid Biopsy Market Forecasts to 2034 – Global Analysis By Product (NGS-Based MRD Assays, PCR-Based MRD Assays, Digital PCR MRD Tests, Cell-Free DNA MRD Tests, Other Products), By Cancer Type, By Sample Type, By Technology, By End User and By Geography

Product link: https://marketpublishers.com/r/MF895D4371ACEN.html

Price: US$ 4,150.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:
info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/MF895D4371ACEN.html