

Molecular Targeted Diagnostics Market Assessment, By Product & Service [Reagents & Kits, Instruments and Services & Software], By Sample Type [Blood, Serum, and Plasma, Urine and Others], By Test Type [Lab Tests and PoC Tests], By Technology [Isothermal Nucleic Acid Amplification Technology, DNA Sequencing & Next-generation Sequencing, Polymerase Chain Reaction, In Situ Hybridization and DNA Microarrays and Others], By Application [Infectious Disease Diagnostics, Oncology Testing, Genetic Testing and Others], End-user [Diagnostic Laboratories, Hospitals & Clinics and Others], By Region, Opportunities and Forecast, 2017-2031F

<https://marketpublishers.com/r/M02CDA5A1781EN.html>

Date: March 2025

Pages: 211

Price: US\$ 4,500.00 (Single User License)

ID: M02CDA5A1781EN

Abstracts

Global molecular targeted diagnostics Market size was valued at USD 14.75 billion in 2023 which is expected to reach USD 25.47 billion in 2031 with a CAGR of 7.07% for the forecast period between 2024 and 2031. Various factors propel the growth and evolution of the global molecular targeted diagnostics market. Some of the drivers are growing need for companion diagnostics, advancements in technology, a surge in prevalence of chronic diseases, the emergence of personalized medicine, governmental initiatives, and increasing investment in research & development. One of the key drivers of global molecular targeted diagnostics market is the increasing demand for companion diagnostics, which plays a crucial role in tailoring treatments to individual patients by identifying specific biomarkers that assist in predicting treatment responses. Moreover,

continuous advancements in technology have led to the development of advanced diagnostic tools that offer enhanced accuracy and precision, fostering the expansion of global molecular targeted diagnostics market. The increasing prevalence of chronic diseases including cancer, cardiovascular diseases, and infectious ailments, has amplified the necessity for reliable diagnostic techniques. Furthermore, the emergence of personalized medicine has revolutionized healthcare by emphasizing treatments tailored to an individual's genetic makeup and specific biomarkers.

Government initiatives supporting precision medicine and healthcare infrastructure expansion, coupled with increasing awareness and patient empowerment regarding the benefits of early diagnosis and targeted treatments, have significantly propelled the adoption of molecular targeted diagnostics. Additionally, significant investments in research and development by pharmaceutical and biotech companies aim to innovate and improve diagnostic tools, fostering growth in global molecular targeted diagnostics market by enhancing accuracy, efficacy, and accessibility.

Advent of Personalized Medicine

The emergence of personalized medicine is a pivotal driver propelling the global molecular targeted diagnostics market. This approach tailors treatments according to patients' unique genetic profiles, biomarkers, and characteristics. Precision diagnostic tools, like molecular targeted diagnostics, are important for identifying specific genetic alterations and biomarkers critical for determining treatment strategies. These diagnostics tools serve a crucial role by guiding targeted therapies, forecasting treatment outcomes, and enhancing patient responses. As the demand increases for personalized treatments that cater to individual patient needs, the importance of personalized medicine will also increase. Consequently, this surge in significance fuels the broader adoption and utilization of molecular targeted diagnostics across various healthcare settings worldwide. This symbiotic relationship between personalized medicine and molecular targeted diagnostics signifies a transformative shift toward more individualized and effective patient care strategies within the global healthcare landscape.

Increasing in Investments in Research & Development

Technological developments in diagnostic technologies are being driven by increased funding for research and development. These financial investments help develop more accurate, efficient, and widely available diagnostic tools. Additionally, they assist in validating and approving complicated diagnostic tests, broadening their usage across

various healthcare domains. This increased funding substantially contributes to the market's expansion by improving diagnostic precision and effectiveness and, ultimately, fostering enhanced patient care on a larger scope. In August 2023, significant financial support was given to researchers at the City of Hope Medical Centre in California to develop a novel targeted chemotherapy. The new targeted chemotherapy showed promising results against all solid tumors in preclinical studies. Targeting proliferating cell nuclear antigen (PCNA), a protein that had been 'undruggable,' the novel drug candidate AOH1996 appears to eliminate all solid tumors related to PCNA.

Numerous Clinical Benefits of In Situ Hybridization

In situ hybridization (ISH) serves a critical function by allowing visualization and recognition of precise nucleic acid sequences within cells or tissues. This method assists in identifying gene expressions, changes, or disease-causing components, thereby aiding precise disease identification and tailored treatment approaches. As healthcare prioritizes targeted and personalized therapies more, the increased demand for precise molecular diagnostics, notably ISH, fosters the growth of global molecular targeted diagnostics market. This demand facilitates accurate identification and understanding of biomarkers, elevating diagnostic capacities across different diseases globally. In May 2023, Bio-Techne, revealed enhancements in advanced cell diagnostics (ACD)-branded RNAscope in situ hybridization (ISH) range. This extension involves the introduction of an RNAscope multiomic workflow designed for the Standard BioTools Hyperion Imaging System.

Government Initiatives

Governments actively participate in initiatives to enhance molecular targeted diagnostics by creating specialized research hubs. These initiatives are intended to progress research, foster innovation, and encourage the adoption of state-of-the-art diagnostic technologies. By nurturing environments conducive to research and development, these undertakings drive the growth and development of the global molecular targeted diagnostics market. These coordinated government initiatives stimulate technological progress and endorse the validation and assimilation of innovative diagnostic instruments, ultimately augmenting healthcare capabilities and advancing the quality of patient care globally. For instance, in August 2023, Kalyan Singh Super Specialty Cancer Institute (KSSSCI), a distinguished establishment operated by the Government of Uttar Pradesh, collaborated with Karkinos Healthcare and the Indian Institute of Technology Kanpur. This impactful three-way alliance signifies the launch of the 'Centre for Advanced Molecular Diagnostics and Research for

Cancer (CAMDRC)', slated to be established in Lucknow.

Growing Demand for Infectious Disease Diagnostics

The rising demand for infectious disease diagnostics acts as a fundamental force propelling the global molecular targeted diagnostics market. This increase in demand arises from the essential need for precise, swift, and specialized diagnostic instruments to detect viruses, bacteria, or parasites accurately. Molecular targeted diagnostics is responsible for promptly identifying and characterizing these infectious agents, allowing for timely treatment choices and strategies to control infections. With persistent challenges posed by infectious diseases in the global healthcare scenario, the amplified necessity for accurate diagnostic tools drives the worldwide expansion and uptake of molecular targeted diagnostics. In April 2023, Thermo Fisher Scientific introduced the inaugural set of 37 CE-IVD-marked real-time PCR assay kits. Primarily designed for diagnosing infectious diseases, these kits are part of the company's plan to unveil a total of 37 such kits within the year. This launch signifies the introduction of Thermo Fisher Scientific's own company-branded test kits, enabling users of its QuantStudio Dx series of instruments to access a diverse range of testing options for the first time.

Outlook of Global Molecular Targeted Diagnostics Market

The future expansion prospects of the global molecular targeted diagnostics market are substantial. Technological advancements, especially in genomics, proteomics, and molecular biology, pave the path for more refined and thorough diagnostic tools. The rising prevalence of chronic illnesses, infectious diseases, and cancer cases on a global scale fuels the need for early detection and personalized therapies, fostering the adoption of molecular targeted diagnostics. Furthermore, the paradigm shifts toward personalized medicine, focusing on customized treatments rooted in individual genetic profiles, intensifies the demand for precise diagnostic methods. Ongoing investments in research and development by pharmaceutical and biotech firms aim to innovate and refine diagnostic precision. Government initiatives backing precision medicine and healthcare infrastructure also play pivotal roles in market growth. As healthcare professionals and patients become increasingly aware of the advantages of early diagnosis, the global molecular targeted diagnostics market is positioned for substantial expansion, leading to improved patient care and treatment outcomes worldwide.

Key Players Landscape and Outlook

Many companies in the global molecular targeted diagnostics market are actively

participating in strategic partnerships. These alliances seek to merge knowledge, technologies, and resources to create advanced diagnostic tools. Collaborations facilitate the integration of various expertise and research capabilities, expediting the development of precise and efficient diagnostic solutions. Through leveraging collective strengths, companies navigate complexities, expanding market presence. These collaborations foster synergy, advancing the progress and acceptance of molecular targeted diagnostics. Consequently, they offer improved diagnostic accuracy and effectiveness, ultimately benefiting healthcare systems and global patients. In February 2023, Thermo Fisher Scientific disclosed that its Applied Biosystems TaqPath PCR kits used in diagnosing infectious diseases like multi-drug-resistant tuberculosis (MTB MDR), *M. tuberculosis* complex (MTB), hepatitis B virus (HBV), hepatitis C virus (HCV), human immunodeficiency virus (HIV), and for genetic analysis (HLA B27) have obtained licensing approval from the Central Drugs Standard Control Organisation (CDSCO). Thermo Fisher Scientific will collaborate with Mylab Discovery Solutions to produce these kits in India.

Contents

1. RESEARCH METHODOLOGY

2. PROJECT SCOPE & DEFINITIONS

3. OUTLOOK OF GLOBAL MOLECULAR TARGETED DIAGNOSTICS MARKET

4. EXECUTIVE SUMMARY

5. GLOBAL MOLECULAR TARGETED DIAGNOSTICS MARKET OUTLOOK, 2017-2031F

5.1. Market Size & Forecast

5.1.1. Value

5.1.2. Volume

5.2. By Product

5.2.1. Reagents & Kits

5.2.2. Instruments

5.2.3. Services & Software

5.3. By Sample Type

5.3.1. Blood, Serum, and Plasma

5.3.2. Urine

5.3.3. Others

5.4. By Test Type

5.4.1. Lab Tests

5.4.2. PoC Tests

5.5. By Technology

5.5.1. Isothermal Nucleic Acid Amplification Technology

5.5.2. DNA Sequencing & Next-generation Sequencing

5.5.3. Polymerase Chain Reaction

5.5.4. In Situ Hybridization

5.5.5. DNA Microarrays

5.5.6. Next Generation Sequencing

5.5.7. Others

5.6. By Application

5.6.1. Infectious Disease Diagnostics

5.6.1.1. Hepatitis

5.6.1.2. HPV

- 5.6.1.3. HIV
- 5.6.1.4. HAI
- 5.6.1.5. CT/NG
- 5.6.1.6. Tuberculosis
- 5.6.1.7. Influenza
- 5.6.1.8. Others
- 5.6.2. Oncology Testing
 - 5.6.2.1. Lung Cancer
 - 5.6.2.2. Prostate Cancer
 - 5.6.2.3. Breast Cancer
 - 5.6.2.4. Colorectal Cancer
 - 5.6.2.5. Others
- 5.6.3. Genetic Testing
- 5.6.4. Blood Testing
- 5.6.5. Others
- 5.7. By End-user
 - 5.7.1. Hospitals & Clinics
 - 5.7.2. Diagnostic Laboratories
 - 5.7.3. Others
- 5.8. By Region
 - 5.8.1. North America
 - 5.8.2. Europe
 - 5.8.3. South America
 - 5.8.4. Asia-Pacific
 - 5.8.5. Middle East and Africa
- 5.9. By Company Market Share (%), 2022

6. GLOBAL MOLECULAR TARGETED DIAGNOSTICS MARKET OUTLOOK, BY REGION, 2017-2031F

- 6.1. North America*
 - 6.1.1. By Product
 - 6.1.1.1. Reagents & Kits
 - 6.1.1.2. Instruments
 - 6.1.1.3. Services & Software
 - 6.1.2. By Sample Type
 - 6.1.2.1. Blood, Serum, and Plasma
 - 6.1.2.2. Urine
 - 6.1.2.3. Others

- 6.1.3. By Test Type
 - 6.1.3.1. Lab Tests
 - 6.1.3.2. PoC Tests
- 6.1.4. By Technology
 - 6.1.4.1. Isothermal Nucleic Acid Amplification Technology
 - 6.1.4.2. DNA Sequencing & Next-generation Sequencing
 - 6.1.4.3. Polymerase Chain Reaction
 - 6.1.4.4. In Situ Hybridization
 - 6.1.4.5. DNA Microarrays
 - 6.1.4.6. Next Generation Sequencing
 - 6.1.4.7. Others
- 6.1.5. By Application
 - 6.1.5.1. Infectious Disease Diagnostics
 - 6.1.5.1.1. Hepatitis
 - 6.1.5.1.2. HPV
 - 6.1.5.1.3. HIV
 - 6.1.5.1.4. HAI
 - 6.1.5.1.5. CT/NG
 - 6.1.5.1.6. Tuberculosis
 - 6.1.5.1.7. Influenza
 - 6.1.5.1.8. Others
 - 6.1.5.2. Oncology Testing
 - 6.1.5.2.1. Lung Cancer
 - 6.1.5.2.2. Prostate Cancer
 - 6.1.5.2.3. Breast Cancer
 - 6.1.5.2.4. Colorectal Cancer
 - 6.1.5.2.5. Others
 - 6.1.5.3. Genetic Testing
 - 6.1.5.4. Blood Testing
 - 6.1.5.5. Others
- 6.1.6. By End-user
 - 6.1.6.1. Hospitals & Clinics
 - 6.1.6.2. Diagnostic Laboratories
 - 6.1.6.3. Others
- 6.1.7. United States*
 - 6.1.7.1. By Product
 - 6.1.7.1.1. Reagents & Kits
 - 6.1.7.1.2. Instruments
 - 6.1.7.1.3. Services & Software

- 6.1.7.2. By Sample Type
 - 6.1.7.2.1. Blood, Serum, and Plasma
 - 6.1.7.2.2. Urine
 - 6.1.7.2.3. Others
- 6.1.7.3. By Test Type
 - 6.1.7.3.1. Lab Tests
 - 6.1.7.3.2. PoC Tests
- 6.1.7.4. By Technology
 - 6.1.7.4.1. Isothermal Nucleic Acid Amplification Technology
 - 6.1.7.4.2. DNA Sequencing & Next-generation Sequencing
 - 6.1.7.4.3. Polymerase Chain Reaction
 - 6.1.7.4.4. In Situ Hybridization
 - 6.1.7.4.5. DNA Microarrays
 - 6.1.7.4.6. Next Generation Sequencing
 - 6.1.7.4.7. Others
- 6.1.7.5. By Application
 - 6.1.7.5.1. Infectious Disease Diagnostics
 - 6.1.7.5.1.1. Hepatitis
 - 6.1.7.5.1.2. HPV
 - 6.1.7.5.1.3. HIV
 - 6.1.7.5.1.4. HAI
 - 6.1.7.5.1.5. CT/NG
 - 6.1.7.5.1.6. Tuberculosis
 - 6.1.7.5.1.7. Influenza
 - 6.1.7.5.1.8. Others
 - 6.1.7.5.2. Oncology Testing
 - 6.1.7.5.2.1. Lung Cancer
 - 6.1.7.5.2.2. Prostate Cancer
 - 6.1.7.5.2.3. Breast Cancer
 - 6.1.7.5.2.4. Colorectal Cancer
 - 6.1.7.5.2.5. Others
 - 6.1.7.5.3. Genetic Testing
 - 6.1.7.5.4. Others
- 6.1.7.6. By End-user
 - 6.1.7.6.1.1. Hospital & Clinics
 - 6.1.7.6.1.2. Diagnostic Laboratories
 - 6.1.7.6.1.3. Others
- 6.1.7.7. Canada
- 6.1.7.8. Mexico

*All segments will be provided for all regions and countries covered

6.2. Europe

6.2.1 Germany

6.2.2 France

6.2.3 Italy

6.2.4 United Kingdom

6.2.5 Russia

6.2.6 Netherlands

6.2.7 Spain

6.2.8 Turkey

6.2.9 Poland

6.3. South America

6.3.1. Brazil

6.3.2. Argentina

6.4. Asia-Pacific

6.4.1. India

6.4.2. China

6.4.3. Japan

6.4.4. Australia

6.4.5. Vietnam

6.4.6. South Korea

6.4.7. Indonesia

6.4.8. Philippines

6.5. Middle East & Africa

6.5.1. Saudi Arabia

6.5.2. UAE

6.5.3. South Africa

7. MARKET MAPPING, 2023

7.1. By Product

7.2. By Sample Type

7.3. By Test Type

7.4. By Technology

7.5. By Application

7.6. By End-user

7.7. By Region

8. MACRO ENVIRONMENT AND INDUSTRY STRUCTURE

- 8.1. Supply Demand Analysis
- 8.2. Import Export Analysis
- 8.3. Value Chain Analysis
- 8.4. PESTEL Analysis
 - 8.4.1. Political Factors
 - 8.4.2. Economic System
 - 8.4.3. Social Implications
 - 8.4.4. Technological Advancements
 - 8.4.5. Environmental Impacts
 - 8.4.6. Legal Compliances and Regulatory Policies (Statutory Bodies Included)
- 8.5. Porter's Five Forces Analysis
 - 8.5.1. Supplier Power
 - 8.5.2. Buyer Power
 - 8.5.3. Substitution Threat
 - 8.5.4. Threat from New Entrant
 - 8.5.5. Competitive Rivalry

9. MARKET DYNAMICS

- 9.1. Growth Drivers
- 9.2. Growth Inhibitors (Challenges and Restraints)

10. REGULATORY FRAMEWORK AND INNOVATION

- 10.1 Clinical Trials
- 10.2 Patent Landscape
- 10.3 Regulatory Approvals
- 10.4 Innovations/Emerging Technologies

11. KEY PLAYERS LANDSCAPE

- 11.1. Competition Matrix of Top Five Market Leaders
- 11.2. Market Revenue Analysis of Top Five Market Leaders (in %, 2023)
- 11.3. Mergers and Acquisitions/Joint Ventures (If Applicable)
- 11.4. SWOT Analysis (For Five Market Players)
- 11.5. Patent Analysis (If Applicable)

12. PRICING ANALYSIS

13. CASE STUDIES

14. KEY PLAYERS OUTLOOK

14.1. F. Hoffmann-La Roche Ltd.

14.1.1. Company Details

14.1.2. Key Management Personnel

14.1.3. Products & Services

14.1.4. Financials (As reported)

14.1.5. Key Market Focus & Geographical Presence

14.1.6. Recent Developments

14.2. Novartis AG

14.3. Abbott Laboratories

14.4. Becton, Dickinson, and Company

14.5. Siemens Healthineers

14.6. Agilent Technologies, Inc.

14.7. Hologic, Inc.

14.8. bioMerieux SA

14.9. QIAGEN Biotechnology Malaysia Sdn Bhd.

14.10. Danaher Corporation

14.11. Illumina, Inc.

14.12. Thermo Fisher Scientific Inc.

*Companies mentioned above DO NOT hold any order as per market share and can be changed as per information available during research work

15. STRATEGIC RECOMMENDATIONS

16. ABOUT US & DISCLAIMER

I would like to order

Product name: Molecular Targeted Diagnostics Market Assessment, By Product & Service [Reagents & Kits, Instruments and Services & Software], By Sample Type [Blood, Serum, and Plasma, Urine and Others], By Test Type [Lab Tests and PoC Tests], By Technology [Isothermal Nucleic Acid Amplification Technology, DNA Sequencing & Next-generation Sequencing, Polymerase Chain Reaction, In Situ Hybridization and DNA Microarrays and Others], By Application [Infectious Disease Diagnostics, Oncology Testing, Genetic Testing and Others], End-user [Diagnostic Laboratories, Hospitals & Clinics and Others], By Region, Opportunities and Forecast, 2017-2031F

Product link: <https://marketpublishers.com/r/M02CDA5A1781EN.html>

Price: US\$ 4,500.00 (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/M02CDA5A1781EN.html>