

Precision Medicine Market - A Global and Regional Analysis: Focus on Ecosystem, Application, and Region - Analysis and Forecast, 2024-2034

<https://marketpublishers.com/r/PCC359F6B7EFEN.html>

Date: February 2025

Pages: 0

Price: US\$ 5,500.00 (Single User License)

ID: PCC359F6B7EFEN

Abstracts

Hard copy option is available on any of the options above at an additional charge of \$500. Please email us at order@marketpublishers.com with your request.

This report will be delivered in 7-10 working days.

Introduction of Precision Medicine

Precision medicine utilizes an individual's distinct clinical, molecular, and lifestyle data to inform the diagnosis, treatment, and prevention of cancer, inherited diseases, and other complex conditions. Precision medicine represents a transformative shift in healthcare, moving away from the traditional one-size-fits-all approach to a more tailored and targeted therapeutic strategy. By leveraging advancements in genomics, molecular diagnostics, and data analytics, precision medicine enables healthcare providers to craft personalized treatment plans based on an individual's genetic, environmental, and lifestyle factors. This approach not only promises to enhance the effectiveness of treatments but also reduces unnecessary trial-and-error, leading to better patient outcomes and reduced healthcare costs. As the field continues to evolve, large-scale population studies and cutting-edge technologies are paving the way for more accurate disease predictions, early diagnoses, and optimized therapeutic interventions.

Market Introduction

The global precision medicine market is expected to witness substantial growth, projected to reach \$469 billion by 2034. The growing adoption of precision medicine has been fueled by the expansion of multi-omics research, which combines genomics, proteomics, metabolomics, and other molecular data to create a more comprehensive

understanding of health and disease. This innovative approach holds significant potential in various therapeutic areas, including oncology, pharmacogenomics, and inherited diseases.

The precision medicine market has been experiencing rapid growth driven by advancements in sequencing technologies, decreasing sequencing costs, shifting trends toward personalized health, etc. Moreover, advancements in gene sequencing and editing, particularly with CRISPR and next-generation sequencing (NGS), are driving precision medicine forward by enabling more targeted and personalized treatments. These technologies allow for more effective cancer therapies, such as CAR-T cell therapy, which harnesses the patient's immune system to fight cancer. As these technologies evolve, they are expected to further enhance the accuracy of diagnoses, facilitate early interventions, and optimize therapeutic outcomes, contributing to the growing demand for precision medicine solutions in oncology and genetic disorders.

In addition, spatiotemporal omics technologies and proteomics have emerged as critical tools for understanding complex diseases at a molecular level. By analyzing variations in genomic, proteomic, and metabolomic profiles, these technologies provide deeper insights into the heterogeneity of diseases such as cancer, paving the way for treatments tailored to an individual's unique disease characteristics. The integration of artificial intelligence (AI), big data analytics, and IoT technologies has also been transforming the precision medicine landscape by enabling real-time monitoring and analysis of patient data. These advancements improve the ability to predict disease progression, personalize treatments, and enhance patient outcomes. However, they also introduce challenges, such as data privacy concerns and the need for advanced computational tools, which could impact the overall adoption and scalability of precision medicine solutions in the market. As these technologies mature, they will drive further innovation in the precision medicine space, leading to more efficient and effective healthcare models.

Industrial Impact

Precision medicine is reshaping the healthcare industry by enabling personalized treatments that significantly improve patient outcomes. For instance, the use of genetic profiling in oncology has led to the development of targeted therapies such as Herceptin for breast cancer, which is specifically designed to treat patients with HER2-positive tumors. In addition to improving individual patient care, precision medicine is driving innovation across the healthcare ecosystem, particularly in drug discovery and clinical trials. The pharmaceutical industry is leveraging genomics to discover new drug targets,

as seen in the development of the breakthrough drug Kymriah, a CAR-T therapy for leukemia, which was developed through the identification of genetic markers specific to the disease. Clinical trials are also becoming more targeted, with companies such as Novartis and Pfizer using genomic data to stratify patient populations and improve trial efficiency. Moreover, the integration of precision medicine into population health management is evident in initiatives such as Geisinger Health System's MyCode Community Health Initiative, which offers genomic sequencing to patients to improve preventive care and early disease detection. This growing application of precision medicine has not only improved individual treatment outcomes but has also helped to optimize healthcare delivery systems, reduce costs, and accelerate the development of new therapies.

Market Segmentation

Segmentation 1: by Ecosystem

Applied Science

- o Genomics
- o Pharmacogenomics
- o Other Applied Science

Precision Diagnostics

- o Molecular Diagnostics
- o Medical Imaging

Digital Health and Information Technology

- o Clinical Decision Support Systems (CDSS)
- o Big Data Analytics

- o IT Infrastructure

- o Genomics Informatics

- o In-Silico Informatics

- o Mobile Health

Precision Therapeutics

- o Clinical Trials

- o Cell Therapy

- o Drug Discovery and Research

- o Gene Therapy

In the global precision medicine market, as of 2023, the precision therapeutics segment holds the largest share at 33.6%. Precision therapeutics has gained significant traction in oncology, rare diseases, and chronic conditions, where traditional treatments often fall short due to its ability to offer highly personalized treatment options that are tailored to an individual's genetic, molecular, and environmental profiles. Moreover, the growing use of biomarker-driven patient selection in clinical trials further enhances treatment efficacy, as it helps identify the right patients for the right therapies, reducing trial failure rates and accelerating the path to successful treatments. On the other hand, the digital health and IT infrastructure segment is projected to grow at the highest (CAGR) of 14.4% from 2024 to 2034. Digital health is becoming an increasingly important part of precision medicine due to its ability to enhance patient care through the collection, transmission, and integration of vast amounts of personalized health data. Moreover, it allows for the real-time tracking of a patient's health, enabling quick modifications to treatment plans as needed. This continuous feedback loop ensures that therapies remain optimal throughout the course of treatment, helping to improve patient outcomes.

Segmentation 2: by Application

Oncology

Infectious Diseases

Neurology/Psychiatry

Life Style and Endocrinology

Cardiology

Gastroenterology

Others

Based on application, the global precision medicine market was led by the oncology segment, which held a 52.8% share in 2023. The global increase in cancer burden has been one of the major factors driving the demand for precision medicine. For instance, according to the World Health Organization, more than 35 million new cancer cases are expected by 2050, marking a 77% increase from the estimated 20 million cases in 2022. Moreover, technological advancements, especially in genomic sequencing and molecular diagnostics, have transformed cancer treatment. Next-generation sequencing (NGS) identifies genetic alterations and biomarkers, enabling personalized therapies tailored to a patient's tumor characteristics. In addition, the growing integration of genomic data into immunotherapy, where treatments are increasingly guided by specific genetic or molecular markers that predict how patients will respond to immune-based treatments, is driving the segment growth.

Segmentation 3: by Region

North America

- o U.S.

- o Canada

Europe

- o Germany

- o U.K.

- o France

- o Italy

- o Spain

- o Rest-of-Europe

Asia-Pacific

- o Japan

- o India

- o China

- o Australia

- o South Korea

- o Rest-of-Asia-Pacific

Latin America

- o Brazil

- o Mexico

- o Rest-of-Latin America

Middle East and Africa

- o K.S.A.
- o South Africa
- o Rest-of-Middle East and Africa

The precision medicine market in the North America region is expected to witness a significant growth rate of 10.25% during the forecast period, marked by the increasing prevalence of genetic disorders and the growing demand for personalized medicine and robust government initiatives. Also, the strong infrastructure for medical research and clinical trials and increasing investment by biopharmaceutical companies in precision medicine are driving the market. However, the Asia-Pacific region is expected to witness the fastest growth rate of 14.67% during the forecast period 2024-2034. Various factors are expected to contribute to this growth, including increasing disposable income, rising prevalence of chronic disease, increasing demand for personalized health, and increasing focus on the development of cost-effective, advanced diagnostic tools.

Recent Developments in the Precision Medicine Market

In January 2025, OMNY Health and Scipher Medicine entered into a partnership to advance precision medicine in autoimmune diseases. Under this partnership, Scipher Medicine will combine its clinico-transcriptomic data with OMNY Health's vast electronic medical record (EMR) network to enhance treatment options and outcomes for millions of patients worldwide.

In November 2024, 23andMe Holding Co. and Mirador Therapeutics entered into a strategic research collaboration. Through this partnership, Mirador will utilize a curated set of de-identified genetic and phenotypic data from the 23andMe research database, combined with its proprietary Mirador360 development engine, to advance target validation and precision medicine initiatives.

In May 2024, the Precision Health Alliance, a new initiative co-founded by the Duke Clinical Research Institute (DCRI), Beam Therapeutics, CRISPR Therapeutics, Intellia Therapeutics, and Verve Therapeutics, was launched to drive innovation in precision health and medicine. The alliance aims to address challenges in personalized healthcare by focusing on genetic factors and will serve as a collaborative platform for research in gene editing. It seeks to explore

patient preferences, ethical issues, and regulatory challenges while influencing future policies and payment models to expand patient access and accelerate advancements in the field.

In May 2024, Rymedi and Precision Genetics announced a strategic partnership to enhance health outcomes and efficiencies through precision medicine. This collaboration will integrate Precision Genetics' PrecisionOp, a personalized solution to minimize adverse drug reactions and reduce opioid use after surgery, with Rymedi's blockchain-enabled clinical trial and registry platform.

Demand –Drivers, Challenges, and Opportunities

Market Demand Drivers:

Advancement of Sequencing Technologies: The advancement of DNA sequencing technologies has been a key driver in the rapid growth of the precision medicine market, bringing transformative changes to healthcare. From the early days of Sanger sequencing to the innovations in next-generation sequencing (NGS) and long-read technologies, sequencing methods have become more accurate, personalized, and efficient. The dramatic reduction in sequencing costs, from over \$100 million in 2001 to just \$100-\$200 in 2023, has made genomic testing more accessible and integrated into routine clinical care. This affordability is crucial in expanding precision medicine's reach to a broader patient base. Advances in sequencing accuracy, especially with long-read technologies, have enhanced the identification of rare genetic variants and allowed for more precise diagnoses and treatments, particularly in complex conditions such as cancer, cardiovascular diseases, and genetic disorders. Additionally, improvements in sequencing speed and throughput enable faster, large-scale genetic studies, while multi-omics integration provides a more holistic approach to personalized treatment. These developments are accelerating the demand for precision medicine, making genomic testing a core component of modern healthcare.

Market Challenges:

Data Integration and Interoperability Issues: A key challenge in precision medicine is integrating diverse data sources to create a comprehensive view of a patient's health. Healthcare providers must combine electronic health records (EHRs), genomic databases, imaging data, patient-reported outcomes (PROs), and other relevant datasets, but these are often stored in siloed systems that lack seamless

communication. Data silos remain a significant barrier, with platforms used for clinical, genomic, and imaging data often unable to interact effectively. A 2023 HealthIT.gov survey revealed that 40% of healthcare organizations struggle to fully integrate EHRs with external data sources, such as genomic and imaging information. This fragmentation hinders personalized decision-making, as healthcare providers cannot easily access or correlate the necessary data. The complexity of data integration is further compounded by the need for specialized tools to analyze genomic data, natural language processing (NLP) to structure clinical notes and advanced imaging software for aligning data. Additionally, many healthcare systems overlook the integration of PROs, which are critical for understanding a patient's lifestyle and preferences, with over 35% of providers not yet incorporating them into clinical workflows, limiting the ability to offer truly personalized care.

Market Opportunities:

AI Integration in Precision Medicine: The integration of AI into precision medicine (PM) offers a significant opportunity for market growth by enhancing various aspects of healthcare, including risk assessment, treatment optimization, and patient outcomes. AI's ability to process complex biological data, including genetic profiles and patient histories, overcomes traditional barriers to robust risk assessment protocols, enabling more accurate predictions and personalized care. For instance, AI has revolutionized disease diagnosis by identifying patterns that may be missed by human clinicians, particularly in fields like dermatology and Alzheimer's disease. It also improves patient monitoring by leveraging data from wearables and IoT sensors to provide real-time insights, reducing diagnostic errors and enabling timely interventions. Furthermore, AI accelerates drug discovery by analyzing large datasets to identify new therapeutic targets, particularly in cancer, ultimately enhancing the precision and effectiveness of treatments. Integrating AI into clinical decision-making improves diagnostic accuracy and supports clinicians with evidence-based insights, ensuring more informed decisions.

Market Trends:

Integrating Advanced Imaging for Enhanced Diagnostics and Treatment

The trend in precision medicine is shifting toward delivering high-quality, personalized care through the integration of advanced imaging technologies, genomics, and AI-driven solutions. This approach enhances the accuracy and effectiveness of diagnoses and treatment plans by offering a multi-dimensional understanding of diseases such as

cancer. Radiomics and AI are transforming clinical decision-making by providing actionable insights from medical images, enabling a deeper understanding of tumor heterogeneity and patient-specific factors. Additionally, cloud-based platforms and biophysical modeling are allowing for real-time analysis and personalized treatment simulations, further improving clinical outcomes. As these technologies evolve, the demand for high-quality, tailored therapies is expected to rise, offering better results than traditional methods.

Analyst's Thoughts

According to Akash Mhaskar, Principal Analyst – BIS Research, “The precision medicine market is growing rapidly, fueled by advancements in DNA sequencing technologies that make genomic testing more accessible. Despite challenges in data integration, AI offers significant opportunities by enhancing disease diagnosis, risk assessment, and treatment optimization. As AI and sequencing technologies evolve, precision medicine is set to transform patient care, especially in oncology and genetic disorders.”

Contents

Executive Summary

1 MARKET OVERVIEW

1.1 Market Definition

1.2 Precision Medicine: A Frontier in the Genesis of Patient-Centric Medicine

1.3 Precision Medicine: Remodeling the One-Size-Fits-All Theory to Individually Tailored Therapy

1.4 Initiatives and Programs

1.5 Precision Medicine: Enabling Technologies and Applications

1.5.1 Innovators

1.5.1.1 3D DNA Printing

1.5.1.1.1 Introduction

1.5.1.1.2 Role of 3D DNA Printing

1.5.1.2 RNA-Seq

1.5.1.2.1 Introduction

1.5.1.2.2 Role of RNA-Seq in Precision Medicine

1.5.1.2.3 Key Players

1.5.1.3 4D Molecular Imaging

1.5.1.3.1 Introduction

1.5.1.3.2 Role of 4D Molecular Imaging in Precision Medicine

1.5.1.3.3 Key Players

1.5.2 Early Adopters

1.5.2.1 CRISPR

1.5.2.1.1 Introduction

1.5.2.1.2 Role of CRISPR in Precision Medicine

1.5.2.1.3 Key Players

1.5.2.2 Blockchain

1.5.2.2.1 Introduction

1.5.2.2.2 Role of Blockchain in Precision Medicine

1.5.2.2.3 Key Players

1.5.2.3 Imaging Informatics

1.5.2.3.1 Introduction

1.5.2.3.2 Role of Imaging Informatics in Precision Medicine

1.5.2.3.3 Key Players

1.5.3 Early Majority

1.5.3.1 Artificial Intelligence (AI)

- 1.5.3.1.1 Introduction
- 1.5.3.1.2 Role of Artificial Intelligence in Precision Medicine
- 1.5.3.1.3 Key Players
- 1.5.3.2 Circulating Free DNA (cfDNA)
 - 1.5.3.2.1 Introduction
 - 1.5.3.2.2 Role of cfDNA in Precision Medicine
 - 1.5.3.2.3 Key Players
- 1.5.3.3 Big Data
 - 1.5.3.3.1 Introduction
 - 1.5.3.3.2 Role of Big Data in Precision Medicine
 - 1.5.3.3.3 Key Players
- 1.5.3.4 Next-Generation Sequencing (NGS)
 - 1.5.3.4.1 Introduction
 - 1.5.3.4.2 Role of NGS in Precision Medicine
 - 1.5.3.4.3 Key Players
- 1.5.3.5 Health Informatics
 - 1.5.3.5.1 Introduction
 - 1.5.3.5.2 Role of Health Informatics in Precision Medicine
 - 1.5.3.5.3 Key players
- 1.5.3.6 Bioinformatics
 - 1.5.3.6.1 Introduction
 - 1.5.3.6.2 Role of Bioinformatics in Precision Medicine
 - 1.5.3.6.3 Key Players
- 1.5.4 Late Majority
 - 1.5.4.1 Polymerase Chain Reactions (PCR)
 - 1.5.4.1.1 Introduction
 - 1.5.4.1.2 Role of PCR in Precision Medicine
 - 1.5.4.1.3 Key players
 - 1.5.4.2 Microarray
 - 1.5.4.2.1 Role of Microarray in Precision Medicine
 - 1.5.4.2.2 Key Players

2 MARKET: INDUSTRY OUTLOOK

- 2.1 Global Precision Medicine Market: Ecosystem Analysis
- 2.2 Market Trends
 - 2.2.1 Integrating Advanced Imaging for Enhanced Diagnostics and Treatment
 - 2.2.2 Emergence of Biobanks as a Cornerstone of Precision Medicine
- 2.3 Market Dynamics Overview

2.3.1 Market Drivers

- 2.3.1.1 Advancement of Sequencing Technologies
- 2.3.1.2 Rising Prevalence of Chronic Disease across the Globe
- 2.3.1.3 Potential to Reduce Healthcare Costs across the Globe
- 2.3.1.4 Potential to Reduce Adverse Drug Reaction through Pharmacogenomic

Testing

2.3.2 Market Restraints

- 2.3.2.1 Data Integration and Interoperability Issues
- 2.3.2.2 High Costs and Limited Accessibility
- 2.3.2.3 Limited Reimbursement and Insurance Coverage

2.3.3 Market Opportunities

- 2.3.3.1 AI Integration in Precision Medicine
- 2.3.3.2 Increasing Collaborations and Partnerships

2.4 Industry Insights

- 2.4.1 Patent Analysis
- 2.4.2 Pipeline Analysis
- 2.4.3 Legal Requirements and Regulations
- 2.4.4 Legal Requirements and Framework by FDA
- 2.4.5 Legal Requirements and Framework by the EMA
- 2.4.6 Legal Requirements and Framework by the MHLW

2.5 Ecosystem Summary

2.6 Market Overview

2.7 Applied Sciences

2.7.1 Genomics

2.7.2 Global Precision Medicine Market (by Applied Science) (by Genomics)

2.7.2.1 Polymerase Chain Reaction (PCR)

- 2.7.2.1.1 Global Precision Medicine PCR Market (by Product)
- 2.7.2.1.2 Global Precision Medicine PCR Market (by End User)
- 2.7.2.1.3 Global Precision Medicine PCR Market (by Region)

2.7.2.2 Next-Generation Sequencing (NGS)

- 2.7.2.2.1 Global Precision Medicine NGS Market (by Product)
- 2.7.2.2.2 Global Precision Medicine NGS Market (by Technology)
- 2.7.2.2.3 Global Precision Medicine NGS Market (by End User)
- 2.7.2.2.4 Global Precision Medicine NGS Market (by Region)

2.7.2.3 Genome Editing

- 2.7.2.3.1 Global Precision Medicine Genome Editing Market (by Product)
- 2.7.2.3.2 Global Precision Medicine Genome Editing Market (by End User)
- 2.7.2.3.3 Global Precision Medicine Genome Editing Market (by Region)

2.7.2.4 Other Technologies

- 2.7.2.4.1 Global Precision Medicine Other Technologies Market (by Region)
- 2.7.3 Pharmacogenomics
 - 2.7.3.1 Global Precision Medicine Pharmacogenomics Market (by Pharmacogenomics Services)
 - 2.7.3.2 Global Precision Medicine Pharmacogenomics Market (by End User)
 - 2.7.3.3 Global Precision Medicine Pharmacogenomics Market (by Region)
- 2.7.4 Other Applied Sciences
- 2.8 Precision Diagnostics
 - 2.8.1 Molecular Diagnostics (MDx)
 - 2.8.2 Global Precision Medicine Market (by Molecular Diagnostics (by Type))
 - 2.8.2.1 Non-Invasive Prenatal Testing (NIPT)
 - 2.8.2.1.1 Global Precision Medicine NIPT Market (by Platform)
 - 2.8.2.1.2 Global Precision Medicine NIPT Market (by Region)
 - 2.8.2.2 Companion Diagnostics
 - 2.8.2.2.1 Global Precision Medicine Companion Diagnostics Market (by Technology)
 - 2.8.2.2.2 Global Precision Medicine Companion Diagnostics Market (by Indication)
 - 2.8.2.2.3 Global Precision Medicine Companion Diagnostics Market (by Region)
 - 2.8.2.3 Liquid Biopsy
 - 2.8.2.3.1 Global Precision Medicine Liquid Biopsy Market (by Indication)
 - 2.8.2.3.2 Global Precision Medicine Liquid Biopsy Market (by Region)
 - 2.8.2.4 Other Molecular Diagnostics
 - 2.8.2.4.1 Global Precision Medicine Other Molecular Diagnostics Market (by Type)
 - 2.8.2.4.2 Global Precision Medicine Other Molecular Diagnostics Market (by Region)
 - 2.8.3 Medical Imaging
 - 2.8.3.1 Global Precision Medicine Market (by Precision Diagnostics) (by Medical Imaging) (by Type)
 - 2.8.3.1.1 Imaging Analytics
 - 2.8.3.1.2 Imaging Computer-Aided Detection (CADx)
 - 2.8.3.2 Global Precision Medicine Market (by Precision Diagnostics) (by Medical Imaging) (by Region)
 - 2.9 Digital Health and Information Technology
 - 2.9.1 Global Precision Medicine Market (by Digital Health and Information Technology) (by Type)
 - 2.9.1.1 Clinical Decision Support Systems (CDSS)
 - 2.9.1.2 Big Data Analytics
 - 2.9.1.3 IT Infrastructure
 - 2.9.1.3.1 Global Precision Medicine Market (by Digital Health and Information

Technology) (by IT Infrastructure) (by Type)

2.9.1.4 Genomics Informatics

2.9.1.4.1 Global Precision Medicine Market (by Digital Health and Information Technology) (by Genomics Informatics) (by Product Type)

2.9.1.5 In-Silico Informatics

2.9.1.6 Mobile Health

2.9.2 Global Precision Medicine Market (by Digital Health and Information Technology) (by End User)

2.9.3 Global Precision Medicine Market (by Digital Health and Information Technology) (by Region)

2.1 Precision Therapeutics

2.10.1 Global Precision Medicine Market (by Precision Therapeutics)

2.10.1.1 Clinical Trials

2.10.1.1.1 Global Precision Medicine Market (by Precision Therapeutics) (by Clinical Trials) (by Region)

2.10.1.2 Cell Therapy

2.10.1.2.1 Global Precision Medicine Market (by Precision Therapeutics) (by Cell Therapy) (by Region)

2.10.1.3 Drug Discovery and Research

2.10.1.3.1 Global Precision Medicine Market (by Precision Therapeutics) (by Drug Discovery and Research) (by Region)

2.10.1.4 Gene Therapy

2.10.1.4.1 Global Precision Medicine Market (by Precision Therapeutics) (by Gene Therapy) (by Region)

3 APPLICATION

3.1 Application Summary

3.2 Overview

3.3 Oncology

3.3.1 Global Precision Medicine Market (by Oncology)

3.4 Infectious Diseases

3.4.1 Global Precision Medicine Market (by Infectious Disease)

3.5 Neurology

3.5.1 Global Precision Medicine Market (by Neurology)

3.6 Cardiovascular

3.6.1 Global Precision Medicine Market (by Cardiovascular Disease)

3.7 Lifestyle and Endocrinology

3.7.1 Global Precision Medicine Market (by Lifestyle and Endocrinology)

3.8 Gastroenterology

3.8.1 Global Precision Medicine Market (by Gastroenterology)

3.9 Other Applications

3.9.1 Global Precision Medicine Market (by Other Application)

4 REGION

4.1 Overview

4.2 North America

4.2.1 Regional Overview

4.2.2 Driving Factors for Market Growth

4.2.3 Factors Challenging the Market

4.2.3.1 Ecosystem

4.2.4 U.S.

4.2.4.1 U.S. Precision Medicine Market (by Ecosystem),

4.2.5 Canada

4.2.5.1 Canada Precision Medicine Market (by Ecosystem)

4.3 Europe

4.3.1 Regional Overview

4.3.2 Driving Factors for Market Growth

4.3.3 Factors Challenging the Market

4.3.3.1 Europe Precision Medicine Market (by Ecosystem),

4.3.4 Germany

4.3.4.1 Germany Precision Medicine Market (by Ecosystem),

4.3.5 France

4.3.5.1 France Precision Medicine Market (by Ecosystem)

4.3.6 Italy

4.3.6.1 Italy Precision Medicine Market (by Ecosystem),

4.3.7 U.K.

4.3.7.1 U.K. Precision Medicine Market (by Ecosystem),

4.3.8 Spain

4.3.8.1 Spain. Precision Medicine Market (by Ecosystem),

4.3.9 Rest-of-Europe

4.3.9.1 Rest-of-Europe Precision Medicine Market (by Ecosystem)

4.4 Asia-Pacific

4.4.1 Regional Overview

4.4.2 Driving Factors for Market Growth

4.4.3 Factors Challenging the Market

4.4.3.1 Asia-Pacific Precision Medicine Market (by Ecosystem)

4.4.4 Japan

4.4.4.1 Japan Precision Medicine Market (by Ecosystem)

4.4.5 China

4.4.5.1 China Precision Medicine Market (by Ecosystem),

4.4.6 India

4.4.6.1 India Precision Medicine Market (by Ecosystem),

4.4.7 Australia

4.4.7.1 Australia Precision Medicine Market (by Ecosystem),

4.4.8 South Korea

4.4.8.1 South Korea. Precision Medicine Market (by Ecosystem)

4.4.9 Rest-of-APAC

4.4.9.1 Rest-of-APAC Precision Medicine Market (by Ecosystem)

4.5 Latin America

4.5.1 Regional Overview

4.5.2 Driving Factors for Market Growth

4.5.3 Factors Challenging the Market

4.5.3.1 Latin America Precision Medicine Market (by Ecosystem)

4.5.4 Brazil

4.5.4.1 Brazil Precision Medicine Market (by Ecosystem)

4.5.5 Mexico

4.5.5.1 Mexico Precision Medicine Market (by Ecosystem),

4.5.6 Rest-of-Latin America

4.5.6.1 Rest-of-Latin America Precision Medicine Market (by Ecosystem),

4.6 MEA

4.6.1 Regional Overview

4.6.2 Driving Factors for Market Growth

4.6.3 Factors Challenging the Market

4.6.3.1 Middle East and Africa Precision Medicine Market (by Ecosystem),

4.6.4 K.S.A

4.6.4.1 K.S.A Precision Medicine Market (by Ecosystem),

4.6.5 South Africa

4.6.5.1 South Africa Precision Medicine Market (by Ecosystem)

4.6.6 Rest-of-MEA

4.6.6.1 Rest of MEA Precision Medicine Market (by Ecosystem)

5 COMPETITIVE LANDSCAPE

5.1 Competitive Landscape

5.1.1 Synergistic Activities

5.2 Company Profiles

5.2.1 Abbott

5.2.1.1 Overview

5.2.1.2 Top Products

5.2.1.3 Top Competitors

5.2.1.4 Analyst View

5.2.2 Thermo Fisher Scientific, Inc.

5.2.2.1 Overview

5.2.2.2 Top Products

5.2.2.3 Top Competitors

5.2.2.4 Analyst View

5.2.3 Almac Group

5.2.3.1 Overview

5.2.3.2 Top Products/Services

5.2.3.3 Top Competitors

5.2.3.4 Analyst View

5.2.4 ANGLE plc

5.2.4.1 Overview

5.2.4.2 Top Products

5.2.4.3 Top Competitors

5.2.4.4 Analyst View

5.2.5 Astellas Pharma Inc

5.2.5.1 Overview

5.2.5.2 Top Products

5.2.5.3 Top Competitors

5.2.5.4 Analyst View

5.2.6 Bio-Rad Laboratories, Inc.

5.2.6.1 Overview

5.2.6.2 Top Products

5.2.6.3 Top Competitors

5.2.6.4 Analyst View

5.2.7 Epic Sciences

5.2.7.1 Overview

5.2.7.2 Top Products

5.2.7.3 Top Competitors

5.2.7.4 Analyst View

5.2.8 F. Hoffmann-La Roche Ltd.

5.2.8.1 Overview

5.2.8.2 Top Products

- 5.2.8.3 Top Competitors
- 5.2.8.4 Analyst View
- 5.2.9 Merck KGaA
 - 5.2.9.1 Overview
 - 5.2.9.2 Top Products
 - 5.2.9.3 Top Competitors
 - 5.2.9.4 Analyst View
- 5.2.10 Illumina, Inc.
 - 5.2.10.1 Overview
 - 5.2.10.2 Top Products
 - 5.2.10.3 Top Competitors
 - 5.2.10.4 Analyst View
- 5.2.11 QIAGEN N.V.
 - 5.2.11.1 Overview
 - 5.2.11.2 Top Products
 - 5.2.11.3 Top Competitors
 - 5.2.11.4 Analyst View
- 5.2.12 Sysmex Corporation
 - 5.2.12.1 Overview
 - 5.2.12.2 Top Products
 - 5.2.12.3 Top Competitors
 - 5.2.12.4 Analyst View
- 5.2.13 Laboratory Corporation of America Holdings
 - 5.2.13.1 Overview
 - 5.2.13.2 Top Products
 - 5.2.13.3 Top Competitors
 - 5.2.13.4 Analyst View
- 5.2.14 Danaher Corporation
 - 5.2.14.1 Overview
 - 5.2.14.2 Top Products/ Services
 - 5.2.14.3 Top Competitors
 - 5.2.14.4 Analyst View
- 5.2.15 Quest Diagnostics
 - 5.2.15.1 Overview
 - 5.2.15.2 Top Products
 - 5.2.15.3 Top Competitors
 - 5.2.15.4 Analyst View
- 5.2.16 AstraZeneca
 - 5.2.16.1 Overview

- 5.2.16.2 Top Products
- 5.2.16.3 Top Competitors
- 5.2.16.4 Analyst View
- 5.2.17 ASURAGEN, INC
 - 5.2.17.1 Overview
 - 5.2.17.2 Top Products
 - 5.2.17.3 Top Competitors
 - 5.2.17.4 Analyst View
- 5.2.18 bioMérieux SA
 - 5.2.18.1 Overview
 - 5.2.18.2 Top Products
 - 5.2.18.3 Top Competitors
 - 5.2.18.4 Analyst View
- 5.2.19 Bristol-Myers Squibb
 - 5.2.19.1 Overview
 - 5.2.19.2 Top Products
 - 5.2.19.3 Top Competitors
 - 5.2.19.4 Analyst View
- 5.2.20 Pacific Biosciences of California, Inc.
 - 5.2.20.1 Overview
 - 5.2.20.2 Top Products
 - 5.2.20.3 Top Competitors
 - 5.2.20.4 Analyst View
- 5.2.21 Myriad Genetics, Inc.
 - 5.2.21.1 Overview
 - 5.2.21.2 Top Products
 - 5.2.21.3 Top Competitors
 - 5.2.21.4 Analyst View
- 5.2.22 Teva Pharmaceuticals Industries Ltd.
 - 5.2.22.1 Overview
 - 5.2.22.2 Top Products
 - 5.2.22.3 Top Competitors
 - 5.2.22.4 Analyst View
- 5.2.23 Sanofi S.A.
 - 5.2.23.1 Overview
 - 5.2.23.2 Top Products
 - 5.2.23.3 Top Competitors
 - 5.2.23.4 Analyst View
- 5.2.24 Randox Laboratories Ltd.

- 5.2.24.1 Overview
- 5.2.24.2 Top Products
- 5.2.24.3 Top Competitors
- 5.2.24.4 Analyst View
- 5.2.25 Eli Lilly and Company
 - 5.2.25.1 Overview
 - 5.2.25.2 Top Products
 - 5.2.25.3 Top Competitors
 - 5.2.25.4 Analyst View
- 5.2.26 Pfizer Inc.
 - 5.2.26.1 Overview
 - 5.2.26.2 Top Products
 - 5.2.26.3 Top Competitors
 - 5.2.26.4 Analyst View
- 5.2.27 Konica Minolta, Inc.
 - 5.2.27.1 Overview
 - 5.2.27.2 Top Products/Product Portfolio
 - 5.2.27.3 Top Competitors
 - 5.2.27.4 Analyst View
- 5.2.28 Cardiff Oncology
 - 5.2.28.1 Overview
 - 5.2.28.2 Top Products
 - 5.2.28.3 Top Competitors
 - 5.2.28.4 Analyst View
- 5.2.29 GE HealthCare
 - 5.2.29.1 Overview
 - 5.2.29.2 Top Products
 - 5.2.29.3 Top Competitors
 - 5.2.29.4 Analyst View
- 5.2.30 Gilead Science, Inc.
 - 5.2.30.1 Overview
 - 5.2.30.2 Top Products
 - 5.2.30.3 Top Competitors
 - 5.2.30.4 Analyst View
- 5.2.31 GSK plc
 - 5.2.31.1 Overview
 - 5.2.31.2 Top Products
 - 5.2.31.3 Top Competitors
 - 5.2.31.4 Analyst View

5.2.32 Johnson & Johnson

5.2.32.1 Overview

5.2.32.2 Top Products

5.2.32.3 Top Competitors

5.2.32.4 Analyst View

5.2.33 MDx Health, Inc.

5.2.33.1 Overview

5.2.33.2 Top Products

5.2.33.3 Top Competitors

5.2.33.4 Analyst View

5.2.34 Novartis AG

5.2.34.1 Overview

5.2.34.2 Top Products

5.2.34.3 Top Competitors

5.2.34.4 Analyst View

5.2.35 Oracle Corporation

5.2.35.1 Overview

5.2.35.2 Top Products

5.2.35.3 Top Competitors

5.2.35.4 Analyst View

5.2.36 Menarini Silicon Biosystems

5.2.36.1 Overview

5.2.36.2 Top Products

5.2.36.3 Top Competitors

5.2.36.4 Analyst View

6 RESEARCH METHODOLOGY

6.1 Global Precision Medicine Market: Research Methodology

6.1.1 Data Sources

6.1.1.1 Primary Data Sources

6.1.1.2 Secondary Data Sources

6.1.2 Data Triangulation

6.2 Market Estimation and Forecast

List Of Figures

LIST OF FIGURES

- Figure 1: Global Precision Medicine Market, \$Billion, 2023, 2028, and 2034
- Figure 2: Precision Medicine: Treatment Tailored to an Individual's Genetic Structure
- Figure 3: Precision Medicine - a Multi-Faceted Approach to Patient Care
- Figure 4: Decreasing Cost (\$) and Increasing Output (TB) of Genome Sequencing, 2009-2025
- Figure 5: Global Precision Medicine Market (by Region), \$Billion, 2023, 2028, and 2034
- Figure 6: Global Precision Medicine Market (by Ecosystem), \$Billion, 2023, 2028, and 2034
- Figure 7: Global Precision Medicine Market (by Application), \$Million, 2023, 2028, and 2034
- Figure 8: Precision Medicine Approach
- Figure 9: Evolution of Precision Medicine Technology
- Figure 10: Precision Medicine: Enabling Technologies and Applications
- Figure 11: Structured Big Data Reporting Benefits
- Figure 12: Generalized Process for the Microarray
- Figure 13: Stakeholders in Precision Medicine
- Figure 14: Impact Analysis of Global Precision Medicine Market Factors, 2024-2034
- Figure 15: Evolution of DNA Sequencing Technologies
- Figure 16: Cost of Sequencing a Full Human Genome, 2001-2022
- Figure 17: Prevalence of Cancer, in Millions, 2022 - 2035
- Figure 18: Global Burden of Chronic Disease
- Figure 19: Role of AI in Precision Medicine
- Figure 20: Number of Patents Files, 2020-2024
- Figure 21: Precision Medicine by Top Patent Owner
- Figure 22: Precision Medicine: The Ecosystem
- Figure 23: Global Precision Medicine Market (by Applied Sciences)
- Figure 24: Global Precision Medicine Market (by Applied Sciences), \$Billion, 2023-2034
- Figure 25: Precision Medicine: Multi-omics Sciences
- Figure 26: Precision Medicine: Genomics
- Figure 27: Global Precision Medicine Market (by Applied Science) (Genomics) \$Billion, 2023-2034
- Figure 28: Global Precision Medicine PCR Market, \$Billion, 2023-2034
- Figure 29: Global Precision Medicine PCR Market (by Product) \$Billion, 2023-2034
- Figure 30: Global Precision Medicine PCR Market (by End User) \$Billion, 2023-2034
- Figure 31: Global Precision Medicine PCR Market (by Region) \$Billion, 2023-2034

Figure 32: Evolution of Next-Generation Sequencing

Figure 33: Global Precision Medicine NGS Market, \$Billion, 2023-2034

Figure 34: Global Precision Medicine NGS Market (by Product), \$Billion, 2023-2034

Figure 35: Global Precision Medicine NGS Market (by Technology), \$Billion, 2023-2034

Figure 36: Global Precision Medicine NGS Market (by End User), \$Billion, 2023-2034

Figure 37: Global Precision Medicine NGS Market (by Region), \$Billion, 2023-2034

Figure 38: Global Precision Medicine Genome Editing Market, \$Billion, 2023-2034

Figure 39: Global Precision Medicine Genome Editing Market (by Product), \$Billion, 2023-2034

Figure 40: Global Precision Medicine Genome Editing Market (by End User), \$Billion, 2023-2034

Figure 41: Global Precision Medicine Genome Editing Market (by Region), \$Billion, 2023-2034

Figure 42: Global Precision Medicine Other Technologies Market, \$Billion, 2023-2034

Figure 43: Global Precision Medicine Other Technologies Market (by Region), \$Billion, 2023-2034

Figure 44: Role of Biomarkers in Pharmacogenomics

Figure 45: Role of FDA In Pharmacogenomics

Figure 46: Global Precision Medicine Market (by Applied Science) (by Pharmacogenomics), \$Billion, 2023-2034

Figure 47: Global Precision Medicine Pharmacogenomics Market (by Pharmacogenomics Services), \$Billion, 2023-2034

Figure 48: Global Precision Medicine Pharmacogenomics Market (by End User), \$Billion, 2023-2034

Figure 49: Global Precision Medicine Pharmacogenomics Market (by Region), \$Billion, 2023-2034

Figure 50: Global Precision Medicine Market (by Applied Science) (by Others), \$Billion, 2023-2034

Figure 51: Precision Medicine: Diagnostics

Figure 52: Global Precision Medicine Market (by Precision Diagnostic)

Figure 53: Global Precision Medicine Market (by Precision Diagnostics), \$Billion, 2023-2034

Figure 54: Global Precision Medicine Market (by Precision Diagnostics) (by Type), \$Billion, 2023-2034

Figure 55: General Workflow of a Molecular Diagnostic Assay

Figure 56: Global Precision Medicine Market (by Molecular Diagnostics)

Figure 57: Global Precision Medicine Market (by Precision Diagnostics) (by Molecular Diagnostics) \$Billion, 2023-2034

Figure 58: Global Precision Medicine Market (by Molecular Diagnostics)(by Type),

\$Billion, 2023-2034

Figure 59: Benefits and Risks Associated with NIPT

Figure 60: Global Precision Medicine NIPT Market, \$Billion, 2023-2034

Figure 61: Global Precision Medicine NIPT Market (by Platform)\$Billion, 2023-2034

Figure 62: Global Precision Medicine NIPT Market (by Region), \$Billion, 2023-2034

Figure 63: Drug and Companion Diagnostics Development Process

Figure 64: Benefits and Risks Associated with Companion Diagnostics

Figure 65: Global Precision Medicine Companion Diagnostics Market, \$Billion,
2023-2034

Figure 66: Global Precision Medicine Companion Diagnostics Market (by Technology),
\$Billion, 2023-2034

Figure 67: Global Precision Medicine Companion Diagnostics Market (by Indication),
\$Billion, 2023-2034

Figure 68: Global Precision Medicine Companion Diagnostics Market (by Region),
\$Billion, 2023-2034

Figure 69: Clinical Applications of Liquid Biopsy

Figure 70: Global Precision Medicine Liquid Biopsy Market, \$Billion, 2023-2034

Figure 71: Global Precision Medicine Liquid Biopsy Market (by Indication), \$Billion,
2023-2034

Figure 72: Global Precision Medicine Liquid Biopsy Market (by Region), \$Billion,
2023-2034

Figure 73: Global Precision Medicine Other Molecular Diagnostics Market, \$Billion,
2023-2034

Figure 74: Global Precision Medicine Other Molecular Diagnostics Market (by Type),
\$Billion, 2023-2034

Figure 75: Global Precision Medicine Other Molecular Diagnostics Market (by Region),
\$Billion, 2023-2034

Figure 76: Global Precision Medicine Market (by Precision Diagnostics) (by Medical
Imaging) \$Billion, 2023-2034

Figure 77: Global Precision Medicine Market (by Precision Diagnostics) (by Medical
Imaging) (by Type), \$Billion, 2023-2034

Figure 78: Global Precision Medicine Imaging Analytics Market, \$Billion, 2023-2034

Figure 79: Global Precision Medicine CADx Market, Billion,2023-2034

Figure 80: Global Precision Medicine Market (by Precision Diagnostics) (by Medical
Imaging) (by Region), \$Billion, 2023-2034

Figure 81: Global Precision Medicine Digital Health and Information Technology Market,
\$Billion, 2023-2034

Figure 82: Global Precision Medicine Digital Health and Information Technology Market
(by Type), \$Billion, 2023-2034

Figure 83: Global Precision Medicine Market (by Digital Health and Information Technology) (by CDSS) \$Billion, 2023-2034

Figure 84: Big Data Attributes

Figure 85: Global Precision Medicine Market (by Digital Health and Information Technology) (by Big Data Analytics) \$Billion, 2023-2034

Figure 86: Big Data Analytics: Key Benefits

Figure 87: Global Precision Medicine Market (by Digital Health and Information Technology) (by IT Infrastructure) \$Billion, 2023-2034

Figure 88: Global Precision Medicine Market (by Digital Health and Information Technology) (by IT Infrastructure) (by Type) \$Billion, 2023-2034

Figure 89: Global Precision Medicine Market (by Digital Health and Information Technology) (by Genomics Informatics) \$Billion, 2023-2034

Figure 90: Global Precision Medicine Market (by Digital Health and Information Technology) (by Genomics Informatics) (by Product Type) \$Billion, 2023-2034

Figure 91: Global Precision Medicine Market (by Digital Health and Information Technology) (by In-silico Informatics) \$Billion, 2023-2034

Figure 92: Global Precision Medicine Market (by Digital Health and Information Technology) (by Mobile Health) \$Billion, 2023-2034

Figure 93: Global Precision Medicine Market (by Digital Health and Information Technology Market) (by End User), \$Billion, 2023-2034

Figure 94: Global Precision Medicine Market (by Digital Health and Information Technology (by Region), \$Billion, 2023-2034

Figure 95: Global Precision Medicine Market (by Precision Therapeutics) \$Billion, 2023-2034

Figure 96: Global Precision Medicine Market (by Precision Therapeutics) \$Billion, 2023-2034

Figure 97: Global Precision Medicine Market (by Precision Therapeutics) (by Clinical Trials) \$Billion, 2023-2034

Figure 98: Global Precision Medicine Market (by Precision Therapeutics) (by Clinical Trials) (by Region), \$Billion, 2023-2034

Figure 99: Types of Cell Therapy

Figure 100: Global Precision Medicine Market (by Precision Therapeutics) (by Cell Therapy), \$Billion, 2023-2034

Figure 101: Global Precision Medicine Market (by Precision Therapeutics) (by Cell Therapy) (by Region), \$Billion, 2023-2034

Figure 102: Global Precision Medicine Market (by Precision Therapeutics) (by Drug

I would like to order

Product name: Precision Medicine Market - A Global and Regional Analysis: Focus on Ecosystem, Application, and Region - Analysis and Forecast, 2024-2034

Product link: <https://marketpublishers.com/r/PCC359F6B7EFEN.html>

Price: US\$ 5,500.00 (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/PCC359F6B7EFEN.html>