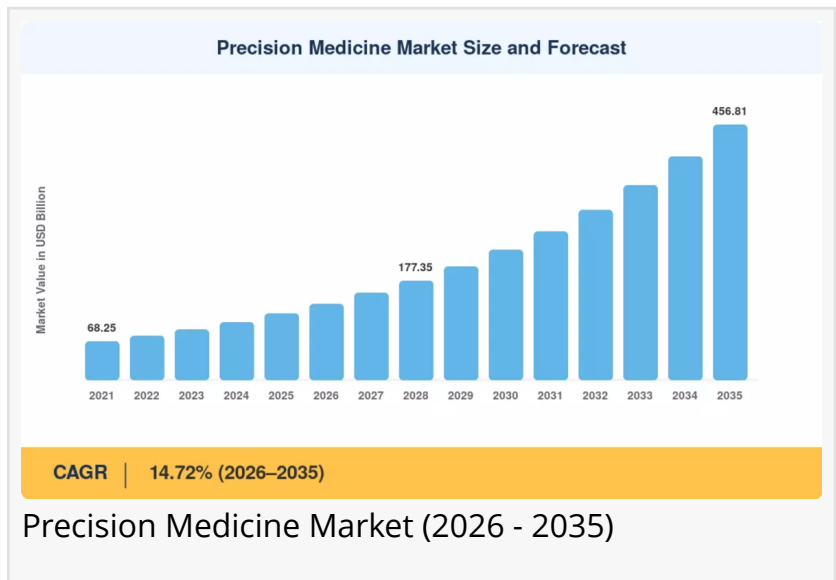


Precision Medicine Market to reach USD 456.81 Billion by 2035 at 14.72% CAGR

Precision Medicine Market to Surge from USD 118.23 Billion in 2025 to USD 456.81 Billion by 2035—Driven by National Genomics Programs, AI Diagnostic Integration

NY, CA, UNITED STATES, September 3, 2026 /EINPresswire.com/ -- As per Market Research Future, the [global Precision Medicine Market size](#)

is projected to reach USD 456.81 Billion by 2035 from USD 118.23 Billion in 2025, at a CAGR of 14.72% during the forecast period 2026–2035. The market base was estimated at USD 118.23 Billion in 2025, with the first year of the forecast period (2026) valued at USD 134.10 Billion.



The 14.72% CAGR is propelled by three converging forces: national genomics and biobank programs, with the U.S. All of Us Research Initiative enrolling over 800,000 participants and Genomics England completing 100,000 whole-genome sequences, creating population-scale datasets that underpin pharmacogenomics drug matching and biomarker-driven therapy development; AI and machine-learning diagnostic integration, with the FDA approving 171 medical devices with AI/ML capabilities in 2024 alone, compressing the timeline from biomarker discovery to clinical implementation; and companion diagnostic regulatory reform, with the FDA's 2023 guidance reducing co-development review timelines from 12 months to roughly seven, and the EMA introducing a parallel scientific advice framework in early 2024.

Global regulatory agencies and research institutions are amplifying this momentum. The U.S. Inflation Reduction Act and the EU Pharmaceutical Strategy have together earmarked over USD 12 billion in incentives for personalized treatment plans and individualized cancer treatment research through 2030. CMS expanded Medicare coverage for pharmacogenomic panel testing in 2024, covering over 200 gene–drug interactions relevant to cardiovascular, oncology, and psychiatric prescribing. North America commands approximately 45% of the Precision Medicine Market, driven by deep payer integration and mature biobank infrastructure, while Asia-Pacific is

the fastest-growing region at a projected CAGR exceeding 15.8% through 2035.

Request A Free Sample:

https://www.marketresearchfuture.com/sample_request/925

Key Market Trends & Growth Drivers

National Genomics and Biobank Infrastructure

Government-funded genome sequencing programs are the single largest structural driver of the Precision Medicine Market through 2035. The U.S. All of Us program has committed USD 3.1 billion to sequence one million genomes, while Genomics England has completed 100,000 whole-genome sequences linked to NHS clinical records. These datasets fuel pharmacogenomics drug matching at the population scale, reducing adverse drug reaction rates by an estimated 25% in early-adopter health systems. China's National Genomics Data Center now holds over 3.8 petabytes of sequencing data, creating a competitive biomarker-driven therapy discovery environment in Asia-Pacific.

AI and Machine-Learning Diagnostic Platforms

AI-powered diagnostics are compressing the timeline from biomarker discovery to clinical implementation. In 2024 alone, the FDA approved 171 medical devices with AI/ML capabilities, a 35% increase from the year before. Platforms from companies like Tempus and Foundation Medicine now analyze multi-omic patient profiles in less than 48 hours, enabling individualized cancer treatment selection at the point of care. This driver disproportionately benefits the Precision Medicine Market in North America and Europe, where EHR integration is most advanced.

Companion Diagnostic Regulatory Reform

The FDA's 2023 revision to companion diagnostic guidelines shortened co-development review timelines from 12 months to approximately seven, enabling earlier market access for drug-diagnostic pairs. The EMA introduced a parallel scientific advice structure in early 2024. These reforms directly accelerate commercialization of targeted molecular therapy because sponsors can now submit biomarker assay data concurrently with pivotal trial results rather than sequentially.

Pharmacogenomics Reimbursement Expansion

CMS expanded Medicare coverage for pharmacogenomic panel testing in 2024, covering over 200 gene-drug interactions relevant to cardiovascular, oncology, and psychiatric prescribing. This policy shift is expected to increase pharmacogenomics drug matching adoption across 60 million Medicare beneficiaries, adding an estimated USD 4.2 billion in annual testing revenue to the

Precision Medicine Market by 2028.

Ask for Customization:

https://www.marketresearchfuture.com/ask_for_customize/925

Market Segment Insights

BY TECHNOLOGY

Next-Generation Sequencing: Largest segment with approximately 38% share in 2025, reflecting widespread clinical adoption for biomarker-driven therapy identification. The cost per genome fell below USD 200 in 2024—a 95% reduction from 2015 levels.

AI and Machine Learning: Fastest-growing technology segment at 19.3% CAGR (2026–2035), driven by FDA clearances and multi-omic data integration capabilities.

Bioinformatics and Big Data Analytics: Significant segment accounting for USD 28.4 Billion in 2025 revenue, underscoring the shift toward computational drug discovery.

BY APPLICATION

Oncology: Largest application with 43.5% share in 2025, driven by expanding panels for individualized cancer treatment. Comprehensive tumor profiling is now standard of care in breast, lung, and colorectal cancers.

Rare and Genetic Disorders: Fastest-growing application at 17.1% CAGR (2026–2035), reflecting orphan drug incentives and improved genomic screening. FDA orphan drug designations numbered 589 in 2024.

Neurology: Significant segment at USD 8.4 Billion in 2025, driven by Alzheimer's biomarker diagnostics.

Infectious Diseases: Growing at 14.8% CAGR (2026–2035), driven by pathogen genomics and antimicrobial resistance surveillance.

BY END USER

Pharmaceutical & Biotechnology Companies: Largest segment with approximately 48% share in 2025, investing heavily in companion diagnostic co-development and pharmacogenomics drug matching for clinical-trial enrichment.

Home-Care Settings: Fastest-growing end-user at 17.0% CAGR (2026–2035), reflecting the broader shift toward decentralized healthcare delivery and direct-to-consumer genomic testing.

platforms.

Hospitals & Clinical Laboratories: Significant segment at USD 26.8 Billion in 2025, driven by point-of-care genomic testing.

Read Detailed Insights:

<https://www.marketresearchfuture.com/reports/precision-medicine-market-925>

Regional Outlook

North America — Dominant Market (~45% Share, 2025)

United States: Generates approximately 82% of North American revenue, driven by NIH precision medicine funding exceeding USD 1.5 billion annually, broad commercial payer adoption of pharmacogenomics drug matching panels, and a regulatory environment that rewards biomarker-stratified drug approvals with priority review vouchers.

Canada: Growing at 10.5% CAGR (2026–2035) , driven by Genomics Canada initiatives and universal health system adoption.

Mexico: Contributes USD 1.8 Billion in 2025, driven by growing clinical-trial outsourcing and COFEPRIS modernization.

Europe — Second Largest (USD 30.7 Billion, 2025)

Germany: Holds 22% of regional share, driven by the BioNTech ecosystem and Fraunhofer diagnostics research.

United Kingdom: Fastest-growing in the region at 14.8% CAGR (2026–2035) , driven by UK Biobank and NHS Genomic Medicine Service.

France: Contributes USD 4.1 Billion in 2025, driven by Plan France Médecine Génomique 2025.

Italy: Holds 9% of regional share, driven by AIFA personalized therapy guidelines.

Spain: Growing at 13.6% CAGR (2026–2035) , driven by the National Center for Genomic Analysis (CNAG).

Nordic Countries: Contribute USD 2.8 Billion in 2025, driven by FinnGen and deCODE Genetics population studies.

Russia: Holds 4% of regional share, driven by the Federal genomics research program.

Rest of Europe: Growing at 12.7% CAGR (2026–2035) , driven by EU4Health program alignment.

Asia-Pacific — Fastest-Growing Region (15.8% CAGR, 2026–2035)

China: Holds 38% of regional share, driven by the National Genomics Data Center and NMPA reforms streamlining companion diagnostic reviews.

India: Fastest-growing in the region at 17.2% CAGR (2026–2035) , driven by the Genome India Initiative targeting 10,000 whole genomes and expanding clinical-trial sector.

Japan: Contributes USD 6.8 Billion in 2025, driven by AMED-funded biobank integration and aging demographics.

South Korea: Growing at 16.1% CAGR (2026–2035) , driven by the K-MASTER precision oncology program.

ASEAN: Contributes USD 3.2 Billion in 2025, driven by Singapore's PRECISE program and medical tourism.

South America — Growing Presence (USD 5.3 Billion, 2025)

Brazil: Anchors the region with 56% of revenue, driven by FIOCRUZ genomics programs and SUS integration.

Argentina: Growing at 13.4% CAGR (2026–2035) , driven by public university genomics research.

Middle East & Africa — Emerging Opportunity (12.9% CAGR, 2026–2035)

Saudi Arabia: Holds 32% of regional share, driven by Vision 2030 health transformation and the Saudi Genome Project (over 100,000 genomes sequenced).

UAE: Fastest-growing in the region at 14.3% CAGR (2026–2035) , driven by the Dubai Genomics Corridor and medical tourism.

South Africa: Contributes USD 0.9 Billion in 2025, driven by the H3Africa consortium and infectious disease genomics.

Egypt: Growing at 12.5% CAGR (2026–2035) , driven by national genetic disease screening programs.

Competitive Landscape and Recent Developments

The Precision Medicine Market exhibits medium concentration, with the top five players

accounting for an estimated 28–34% of global revenue. The competitive landscape is stratified between large-platform integrators, mid-sized specialty firms, and emerging AI-native companies.

KEY COMPANIES AND RECENT MILESTONES

Illumina (September 2024): Launched the NovaSeq X Plus 25B flow cell, doubling clinical throughput and reducing per-sample sequencing costs by 20%. Estimated ~8–11% revenue share.

Roche (Foundation Medicine) (November 2024): Received FDA approval for FoundationOne Liquid CDx as a companion diagnostic for three additional targeted molecular therapy indications in non-small-cell lung cancer. Estimated ~7–10% revenue share.

Thermo Fisher Scientific: Broad life-science tools portfolio with targeted molecular therapy focus. Estimated ~6–9% revenue share.

Tempus (March 2025): Completed its IPO on NASDAQ, raising USD 410 million to expand its AI-driven data platform and international biomarker-driven therapy analytics capabilities. Estimated ~3–5% revenue share.

Guardant Health (August 2024): Received Medicare coverage for its Shield blood test for colorectal cancer early detection. Estimated ~2–4% revenue share.

BioNTech (April 2025): Reported positive Phase II data for its individualized neoantigen cancer vaccine BNT122, demonstrating a 44% reduction in disease recurrence in melanoma patients. Estimated ~2–3% revenue share.

Other Key Players: Qiagen (~4–6%), Exact Sciences (~3–5%), Invitae/Labcorp (~2–4%), Myriad Genetics (~2–3%).

Recent Industry Developments:

U.S. FDA (January 2025): Finalized updated guidance for pharmacogenomics drug matching test submissions, introducing a streamlined 510(k) pathway expected to accelerate time-to-market by 30%.

European Commission (June 2024): Adopted the European Health Data Space regulation, enabling cross-border secondary use of health data for personalized treatment plans research across all 27 EU member states.

India Ministry of Health (February 2025): Announced a USD 280 million expansion of the Genome India Initiative to sequence 100,000 genomes by 2027.

Future Outlook: 2026–2035

The Precision Medicine Market is projected to reach USD 456.81 Billion by 2035, growing at a CAGR of 14.72%, driven by national genomics programs, AI diagnostic integration, and companion diagnostic regulatory reform.

New opportunities lie in:

Liquid Biopsy and Minimal-Residual-Disease Monitoring: Platforms detecting circulating tumor DNA are moving into early-detection and recurrence-monitoring applications, with a global addressable opportunity exceeding USD 18 billion by 2032.

Pharmacogenomics-as-a-Service in Primary Care: Preemptive pharmacogenomics drug matching is migrating from specialty oncology into primary care, where it can reduce adverse drug events across cardiovascular, psychiatric, and pain-management prescribing.

AI-Native Clinical Decision Support: AI-driven systems are expected to influence over 60% of oncology treatment selections in Precision Medicine Market leader countries by 2030.

Personalized mRNA Vaccine Platforms: Oncology mRNA vaccine candidates from BioNTech and Moderna are now in Phase II/III trials, representing a USD 10 billion neoantigen vaccine segment by 2033.

Emerging-Market Genomics Infrastructure Build-Out: India, Brazil, and Southeast Asian nations are investing in national biobanks and genomics infrastructure, creating downstream demand for biomarker-driven therapy development.

By 2035, the Precision Medicine Market is expected to be a cornerstone of healthcare delivery, transforming how therapies are designed, selected, and monitored across therapeutic areas.

More Related Research Insights:

<https://www.marketresearchfuture.com/de/reports/amniotic-membrane-market-5645>

<https://www.marketresearchfuture.com/es/reports/amniotic-membrane-market-5645>

<https://www.marketresearchfuture.com/zh-cn/reports/amniotic-membrane-market-5645>

<https://www.marketresearchfuture.com/ko/reports/amniotic-membrane-market-5645>

<https://www.marketresearchfuture.com/fr/reports/anesthesia-machine-market-6179>

<https://www.marketresearchfuture.com/ja/reports/anesthesia-machine-market-6179>

<https://www.marketresearchfuture.com/de/reports/anesthesia-machine-market-6179>

<https://www.marketresearchfuture.com/fr/reports/animal-model-market-9709>

<https://www.marketresearchfuture.com/ja/reports/animal-model-market-9709>

<https://www.marketresearchfuture.com/de/reports/animal-model-market-9709>

Market Research Future

Market Research Future

+1 855-661-4441

[email us here](#)

This press release can be viewed online at: <https://www.einpresswire.com/article/939287662>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2026 Newsmatics Inc. All Right Reserved.