

# **AI in Drug Discovery Market Size, Trends, Analysis, and Outlook By Offering (Software, Services), By Technology (Machine Learning, Natural Language Processing, Context-aware Processing, Others), By Therapeutic Area (Oncology, Infectious Diseases, Neurology, Metabolic Diseases, Cardiovascular Diseases, Immunology, Others), By Process (Target Identification & Selection, Target Validation, Hit Identification & Prioritization, Hit-to-lead Identification/Lead generation, Lead Optimization, Candidate Selection & Validation), By End-User (Pharmaceutical & Biotechnology Companies, Contract Research Organizations, Research Centers and Academic & Government Institutes), by Country, Segment, and Companies, 2024-2032**

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## **Abstracts**

The global AI in Drug Discovery market size is poised to register 35.6% growth from 2024 to 2032, presenting significant growth prospects for companies operating in the industry. The industry study analyzes the global AI in Drug Discovery market across By Offering (Software, Services), By Technology (Machine Learning, Natural Language Processing, Context-aware Processing, Others), By Therapeutic Area (Oncology, Infectious Diseases, Neurology, Metabolic Diseases, Cardiovascular Diseases, Immunology, Others), By Process (Target Identification & Selection, Target Validation,

Hit Identification & Prioritization, Hit-to-lead Identification/ Lead generation, Lead Optimization, Candidate Selection & Validation), By End-User (Pharmaceutical & Biotechnology Companies, Contract Research Organizations, Research Centers and Academic & Government Institutes)

The AI in drug discovery market is driven by the need for innovative approaches to accelerate the drug development process, reduce costs, and address unmet medical needs. By 2030, the market is poised to witness exponential growth, driven by advancements in artificial intelligence, machine learning, and high-throughput screening technologies. Further, the integration of big data analytics, predictive modeling, and virtual screening techniques into drug discovery pipelines will facilitate the identification of novel drug candidates, optimization of lead compounds, and prediction of drug-target interactions, thereby revolutionizing the pharmaceutical industry and expediting the delivery of new therapies to patients.

#### AI in Drug Discovery Market Drivers, Trends, Opportunities, and Growth Opportunities

This comprehensive study discusses the latest trends and the most pressing challenges for industry players and investors. The AI in Drug Discovery market research analyses the global market trends, key drivers, challenges, and opportunities in the industry. In addition, the latest Future of AI in Drug Discovery survey report provides the market size outlook across types, applications, and other segments across the world and regions. It provides data-driven insights and actionable recommendations for companies in the AI in Drug Discovery industry.

#### Key market trends defining the global AI in Drug Discovery demand in 2024 and Beyond

The industry continues to remain an attractive hub for opportunities for both domestic and global vendors. As the market evolves, factors such as emerging market dynamics, demand from end-user sectors, a growing patient base, changes in consumption patterns, and widening distribution channels continue to play a major role.

#### AI in Drug Discovery Market Segmentation- Industry Share, Market Size, and Outlook to 2032

The AI in Drug Discovery industry comprises a wide range of segments and sub-segments. The rising demand for these product types and applications is supporting companies to increase their investment levels across niche segments. Accordingly, leading companies plan to generate a large share of their future revenue growth from

expansion into these niche segments. The report presents the market size outlook across segments to support AI in Drug Discovery companies scaling up production in these sub-segments with a focus on expanding into emerging countries.

Key strategies adopted by companies within the AI in Drug Discovery industry

Leading AI in Drug Discovery companies are boosting investments to capitalize on untapped potential and future possibilities across niche market segments and surging demand conditions in key regions. Further, companies are leveraging advanced technologies to unlock opportunities and achieve operational excellence. The report provides key strategies opted for by the top 10 AI in Drug Discovery companies.

AI in Drug Discovery Market Study- Strategic Analysis Review

The AI in Drug Discovery market research report dives deep into the qualitative factors shaping the market, empowering you to make informed decisions-

Industry Dynamics: Porter's Five Forces analysis to understand bargaining power, competitive rivalry, and threats that impact long-term strategy formulation.

Strategic Insights: Provides valuable perspectives on key players and their approaches based on comprehensive strategy analysis.

Internal Strengths and Weaknesses: Develop targeted strategies to leverage strengths, address weaknesses, and capitalize on market opportunities.

Future Possibilities: Prepare for diverse outcomes with in-depth scenario analysis. Explore potential market disruptions, technology advancements, and economic changes.

AI in Drug Discovery Market Size Outlook- Historic and Forecast Revenue in Three Cases

The AI in Drug Discovery industry report provides a detailed analysis and outlook of revenue generated by companies from 2018 to 2023. Further, with actual data for 2023, the report forecasts the market size outlook from 2024 to 2032 in three case scenarios- low case, reference case, and high case scenarios.

## AI in Drug Discovery Country Analysis and Revenue Outlook to 2032

The report analyses 22 countries worldwide including the key driving forces and market size outlook from 2021 to 2032. In addition, region analysis across Asia Pacific, Europe, the Middle East, Africa, North America, and South America is included in the study. For each of the six regions, the market size outlook by segments is forecast for 2032.

### North America AI in Drug Discovery Market Size Outlook- Companies plan for focused investments in a changing environment

The US continues to remain the market leader in North America, driven by a large consumer base, the presence of well-established providers, and a strong healthcare infrastructure. Leading companies focus on new product launches in the changing environment. The US healthcare expenditure is expected to grow to \$4.8 trillion in 2024 (around 3.7% growth in 2024), potentially driving demand for various AI in Drug Discovery market segments. Similarly, Strong market demand is encouraging Canadian AI in Drug Discovery companies to invest in niche segments. Further, as Mexico continues to strengthen its relations and invest in technological advancements, the Mexico AI in Drug Discovery market is expected to experience significant expansion, offering lucrative opportunities for both domestic and international stakeholders.

### Europe AI in Drug Discovery Market Size Outlook-Companies investing in assessing consumers, categories, competitors, and capabilities

The German industry remains the major market for companies in the European AI in Drug Discovery industry with consumers in Germany, France, the UK, Spain, Italy, and others anticipated to register a steady demand throughout the forecast period, driving the overall market prospects. In addition, the proactive approach of vendors in identifying and leveraging new growth prospects positions the European AI in Drug Discovery market for an upward trajectory, fostering both domestic and international interest. Leading brands operating in the industry are emphasizing effective marketing strategies, innovative product offerings, and a keen understanding of consumer preferences.

### Asia Pacific AI in Drug Discovery Market Size Outlook- an attractive hub for opportunities for both local and global companies

The increasing prevalence of indications, robust healthcare expenditure, and increasing

investments in healthcare infrastructure drive the demand for AI in Drug Discovery in Asia Pacific. In particular, China, India, and South East Asian AI in Drug Discovery markets present a compelling outlook for 2032, acting as a magnet for both domestic and multinational vendors seeking growth opportunities. Similarly, with a burgeoning population and a rising middle class, India offers a vast consumer market. Japanese and Korean companies are quickly aligning their strategies to navigate changes, explore new markets, and enhance their competitive edge. Our report utilizes in-depth interviews with industry experts and comprehensive data analysis to provide a comprehensive outlook of 6 major countries in the APAC region.

**Latin America AI in Drug Discovery Market Size Outlook-** Continued urbanization and rising income levels

Rising income levels contribute to greater purchasing power among consumers, spurring consumption and creating opportunities for market expansion. Continued urbanization and rising income levels are expected to sustainably drive consumption growth in the medium to long term.

**Middle East and Africa AI in Drug Discovery Market Size Outlook-** continues its upward trajectory across segments

Robust demand from Middle Eastern countries including Saudi Arabia, the UAE, Qatar, Kuwait, and other GCC countries supports the overall Middle East AI in Drug Discovery market potential. Fueled by increasing healthcare expenditure of individuals, growing population, and high prevalence across a few markets drives the demand for AI in Drug Discovery.

**AI in Drug Discovery Market Company Profiles**

The global AI in Drug Discovery market is characterized by intense competitive conditions with leading companies opting for aggressive marketing to gain market shares. The report presents business descriptions, SWOT analysis, growth strategies, and financial profiles. Leading companies included in the study are Aria Pharmaceuticals Inc, Atomwise Inc, BenevolentAI Ltd, Celsius Therapeutics Inc, Cloud Pharmaceuticals Inc, Deep Genomics Inc, Envisagenics Inc, Exscientia Ltd, Google LLC, Illumina Inc, Insilico Medicine Inc, IQVIA Holdings Inc, Microsoft Corp, NVIDIA Corp, Predictive Oncology Inc, Recursion Pharmaceuticals Inc, Schrödinger Inc, Tempus Labs Inc, Tencent Holdings Ltd, Valo Health LLC, Verge Genomics Inc.

## Recent AI in Drug Discovery Market Developments

The global AI in Drug Discovery market study presents recent market news and developments including new product launches, mergers, acquisitions, expansions, product approvals, and other updates in the industry.

## AI in Drug Discovery Market Report Scope

Parameters: Revenue, Volume Price

Study Period: 2023 (Base Year); 2018- 2023 (Historic Period); 2024- 2032 (Forecast Period)

Currency: USD; (Upon request, can be provided in Euro, JPY, GBP, and other Local Currency)

## Qualitative Analysis

Pricing Analysis

Value Chain Analysis

SWOT Profile

Market Dynamics- Trends, Drivers, Challenges

Porter's Five Forces Analysis

Macroeconomic Impact Analysis

Case Scenarios- Low, Base, High

## Market Segmentation:

By Offering

Software

Services

By Technology

Machine Learning

-Deep Learning

-Supervised Learning

-Reinforcement Learning

-Others

Natural Language Processing

Context-aware Processing

Others

By Therapeutic Area

Oncology

Infectious Diseases

Neurology

Metabolic Diseases

Cardiovascular Diseases

Immunology

Others

By Process

Target Identification & Selection

Target Validation

Hit Identification & Prioritization

Hit-to-lead Identification/ Lead generation

Lead Optimization

Candidate Selection & Validation

By End-User

Pharmaceutical & Biotechnology Companies

Contract Research Organizations

Research Centers and Academic & Government Institutes

Geographical Segmentation:

North America (3 markets)

Europe (6 markets)

Asia Pacific (6 markets)

Latin America (3 markets)

Middle East Africa (5 markets)

Companies

Aria Pharmaceuticals Inc

Atomwise Inc

BenevolentAI Ltd



Celsius Therapeutics Inc

Cloud Pharmaceuticals Inc

Deep Genomics Inc

Envisagenics Inc

Exscientia Ltd

Google LLC

Illumina Inc

Insilico Medicine Inc

IQVIA Holdings Inc

Microsoft Corp

NVIDIA Corp

Predictive Oncology Inc

Recursion Pharmaceuticals Inc

Schrödinger Inc

Tempus Labs Inc

Tencent Holdings Ltd

Valo Health LLC

Verge Genomics Inc

Formats Available: Excel, PDF, and PPT

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    - Services
  - By Technology

Machine Learning

-Deep Learning

-Supervised Learning

-Reinforcement Learning

-Others

Natural Language Processing

Context-aware Processing

Others

By Therapeutic Area

Oncology

Infectious Diseases

Neurology

Metabolic Diseases

Cardiovascular Diseases

Immunology

Others

By Process

Target Identification & Selection

Target Validation

Hit Identification & Prioritization

Hit-to-lead Identification/ Lead generation

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By End-User

Pharmaceutical & Biotechnology Companies

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BenevolentAI Ltd  
Celsius Therapeutics Inc  
Cloud Pharmaceuticals Inc  
Deep Genomics Inc  
Envisagenics Inc  
Exscientia Ltd  
Google LLC  
Illumina Inc

Insilico Medicine Inc  
IQVIA Holdings Inc  
Microsoft Corp  
NVIDIA Corp  
Predictive Oncology Inc  
Recursion Pharmaceuticals Inc  
Schrödinger Inc  
Tempus Labs Inc  
Tencent Holdings Ltd  
Valo Health LLC  
Verge Genomics Inc.

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