

Artificial Intelligence (AI) in Pharmaceuticals: Global Markets

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Abstracts

This report on the global market for AI in pharmaceuticals explores market dynamics and trends, and analyzes technological developments, software performance, clinical trials, new product approvals and emerging technologies. The report also includes profiles of leading companies and their strategies.

The report explores how AI is transforming the pharmaceutical industry through enhanced diagnostic capabilities, early disease detection, clinical trial optimization, drug discovery and personalized treatment planning. It also examines AI disruption across industry verticals and value chain stages, while presenting market spending patterns, investment forecasts, R&D expenditures and venture capital funding. The report segments the market by product type, application and region. Types include software and services. Applications include drug discovery and development, clinical trials, personalized medicines and others. The four regions covered are North America, Europe, Asia-Pacific and the Rest of the World. For market estimates, data has been provided for 2024 as the base year, with forecasts for 2025 through 2030.

Report Includes

27 data tables and 62 additional tables

An analysis of the global markets for artificial intelligence (AI) in the pharmaceuticals industry

Analyses of the global market trends, with historic revenue (sales figures) from 2022 to 2024, estimates for 2025, and projections of CAGRs through 2030

Estimates of the market's size and revenue growth prospects, accompanied by a market share analysis by product type, application and region

Facts and figures pertaining to market dynamics, technological advances, regulations, prospects and the impacts of macroeconomic variables

Insights derived from Porter's Five Forces model, as well as a global supply chain analysis

Case studies on AI implementation to streamline processes across drug discovery and development, manufacturing, quality control and patient care

A relevant patent analysis, featuring key granted and published patents

Overview of sustainability trends and ESG developments, with emphasis on consumer attitudes, as well as the ESG risk ratings and practices of leading companies

Analysis of the industry structure, including companies' market shares and rankings, strategic initiatives, M&A activity and a venture funding outlook

Profiles of the leading companies, including Google DeepMind, Atomwise Inc., Insilico Medicine, Recursion Pharmaceuticals and Nvidia Corp.

Summary:

The global market for artificial intelligence (AI) in pharmaceuticals is estimated to grow from \$3.8 billion in 2025 to reach \$15.2 billion by the end of 2030, at a compound annual growth rate (CAGR) of 31.7% from 2025 through 2030.

In the pharmaceutical industry, AI is no longer a futuristic concept but a strategic imperative, transforming everything from early-stage drug discovery, where it drastically accelerates target identification and molecule design, to optimizing clinical trials by enhancing patient recruitment and predicting outcomes. Beyond R&D, AI is streamlining manufacturing processes through predictive maintenance and quality control (QC), and revolutionizing supply chain management with accurate demand forecasting and real-time inventory optimization, ultimately leading to faster time-to-market, reduced costs, and the promise of more personalized therapies for patients. While challenges remain in

data integration, regulatory frameworks and expertise acquisition, the demonstrable benefits and expanding use cases underscore a qualitative market trend toward AI as a foundational technology for innovation and competitive advantage in pharma.

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GOOGLE DEEPMIND
HEALX
IKTOS
INSILICO MEDICINE
INVENIAI LLC.
NVIDIA CORP.
PATHAI INC.
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