

Global Artificial Intelligence (AI) in Clinical Trials Market

Market Research Report | 2025-10-29 | 153 pages | BCC Research

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Report description:**Description****Report Scope**

The report examines trends in the global market for AI in clinical trials. It segments the global market by component, phase, deployment mode, therapeutic area and end user. It also provides insights into key emerging trends and potential growth drivers. Components consist of software and services. Deployment mode include cloud, on-premise, and hybrid. Therapeutic areas include cancers, infectious diseases and neurological diseases. End users include pharmaceutical and biotech companies, contract research organizations (CROs), and research and academic institutes.

The report's regional analysis covers North America, Europe, Asia-Pacific, South America, and the Middle East and Africa. It evaluates the impact of AI adoption in clinical trials and the market dynamics, including drivers and challenges. The study concludes with an analysis of leading companies in the market and their product portfolios.

It includes global revenue (\$ millions) for the base year of 2024, estimates for 2025, and data for the forecast period of 2026 through 2030.

Report Includes

- 56 data tables and 52 additional tables
- In-depth analysis of the global market for artificial intelligence (AI) in pharmaceutical clinical trials
- Analyses of the global market trends, with historic revenue data 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 offerings, deployment type, trial phase, therapeutic area, end user and region
- Facts and figures pertaining to market dynamics, technological advances, regulations, prospects and the impacts of macroeconomic variables
- Impact analysis of U.S. tariff laws on AI in the clinical trials market
- Insights derived from Porter's Five Forces model, as well as a global supply chain analysis

- A look at the regulatory landscape featuring key international and regional regulations and standards for AI adoption
- Evaluation of recent patent activity and key granted and published patents
- Overview of sustainability trends and ESG developments, with emphasis on consumer attitudes, and the ESG scores and practices of leading companies
- Analysis of the industry structure, including companies' market shares and rankings, strategic alliances, M&A activity and a venture funding outlook
- Company profiles of major players within the industry, including IQVIA, Medidata, Saama, Merative, and Nvidia Corp.

Executive Summary

Summary:

The global market for Artificial Intelligence (AI) in Clinical Trials was valued at \$2 billion in 2024 and is estimated to increase from \$2.4 billion in 2025 to reach \$6.5 billion by 2030, at a compound annual growth rate (CAGR) of 22.6% from 2025 through 2030.

Clinical trials have started leveraging advanced algorithms and machine learning (ML) to streamline trial design, patient recruitment, monitoring, and data analysis. The use of AI increases efficiency, reduces timelines, and supports precision medicine through real-time, data-driven decision-making. The global market for AI in clinical trials was valued at \$REDACTED billion in 2024 and is expected to reach \$REDACTED billion by the end of 2030, at a CAGR of REDACTED% during the forecast period.

The use of AI in clinical trials is changing drug development by enabling faster, more accurate, and data-driven decision-making at every research stage. Technologies such as ML, natural language processing (NLP) and predictive analytics help researchers find patients, design protocols and select trial sites, as well as improve trial operations, reduce human error, and accelerate the delivery of effective treatments. AI is also used to analyze complex datasets, including electronic health records (EHRs), genomics, and wearable device outputs, making trials more adaptable and focused.

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AICURE

CONCERTAI

DNANEXUS INC.

INSILICO MEDICINE

INTELLIGENCIA AI

IQVIA

MEDIDATA

MERATIVE

NVIDIA CORP.

PHESI

SAAMA

TEMPUS

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