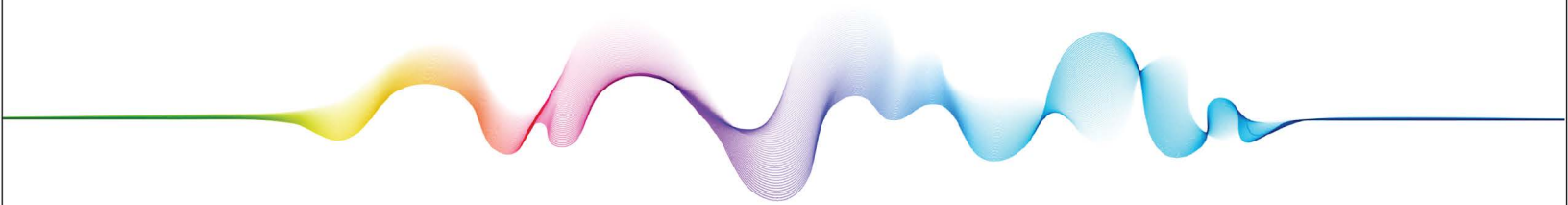


I N S I G H T R E P O R T

# AN OVERVIEW OF ARTIFICIAL INTELLIGENCE FOR BIOTECHNOLOGY



A R T I F I C I A L  
I N T E L L I G E N C E



# An Overview of Artificial Intelligence for Biotechnology

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## Introduction

This TAG Insights Report on *Artificial Intelligence (AI) for Biotechnology* is intended to help companies, managers, practitioners, researchers, investors, and commercial vendors better understand current trends, issues, and market opportunities in this area. A list of representative commercial vendors working in various areas of AI for biotechnology is included. The five specific areas covered in this report include:

1. AI-Assisted Drug Discovery
2. Personalized Medicine
3. Intelligent Medical Diagnostics
4. AI-Based Health Analytics
5. Intelligent Clinical Trial Support

This report is intended for general and unrestricted use, but interested readers are encouraged to connect with the TAG research and advisory team for more information on the private [TAG Research as a Service \(RaaS\)](#) community that covers, discusses, and shares information on these topics in more depth and includes a wider range of startups, vendors, and companies.

## TAG Taxonomy for AI

Our advisory work at TAG is guided by our TAG AI Taxonomy which includes twenty different market categories, with one hundred associated subcategories – all developed consistent with our research into emerging and existing commercial offerings. Subscribers to TAG Research as a

Service (RaaS) have access to the more detailed specifics of the taxonomy and the full set of companies working in each area.

The taxonomy is intended to be interpreted as a market guide for commercial (and in some cases, open source) platform, tools, products, and services. The day-to-day tasks of any practitioners focused on AI will include many considerations such as dealing with regulators, addressing compliance issues, and keeping up with legislation that will not typically be represented in our taxonomy. We focus here on products and services.

TAG Artificial Intelligence (AI) Taxonomy V0.0

<b>1 Agriculture and Farming</b> 1.1 Precision Agriculture 1.2 Intelligent Predictive Maintenance 1.3 Advanced Yield Management 1.4 AI-Based Disease and Pest Control 1.5 Intelligent Livestock Monitoring	<b>6 Conversational AI</b> 6.1 AI Chat Interfaces 6.2 AI Bots 6.3 Intelligent Text Analysis 6.4 Virtual Assistants 6.5 AI-Based Search	<b>11 Entertainment</b> 11.1 AI-Based Sports Analysis 11.2 AI Support for On-Line Dating 11.3 AI-Generated Multimedia Content 11.4 AI-Based On-Line Gaming 11.5 AI Support for Gambling	<b>16 Manufacturing</b> 16.1 AI-Based Predictive Maintenance 16.2 Advanced 3D Printing 16.3 Smart Robotic Assembly 16.4 AI-Based Factory Operations 16.5 AI-Assisted Product Design
<b>2 Autonomous Vehicles</b> 2.1 Intelligent Fleet Management 2.2 Smart Manufacturing and Design 2.3 AI-Assisted Mobility Services 2.4 AI-Based Delivery Services 2.5 Next Generation Ride Sharing	<b>7 Core Technology</b> 7.1 AI and Machine Learning Algorithms 7.2 Natural Language Processing 7.3 AI Software Platforms and Tools 7.4 Intelligent Computing Devices 7.5 Smart AR/VR Devices	<b>12 Finance</b> 12.1 Intelligent Fintech 12.2 AI-Based Insurance Business 12.3 Smart Investment Support 12.4 AI-Assisted Loan Reviews 12.5 AI-Based Credit Process	<b>17 Marketing and Sales</b> 17.1 AI-Assisted Advertising 17.2 Intelligent Support for Sales 17.3 AI-Based Marketing 17.4 Smart Social Media Marketing 17.5 Advanced Predictive Modeling
<b>3 Biotechnology</b> 3.1 AI-Assisted Drug Discovery 3.2 Personalized Medicine 3.3 Intelligent Medical Diagnostics 3.4 AI-Based Health Analytics 3.5 Intelligent Clinical Trial Support	<b>8 Customer Service</b> 8.1 Smart Help Desk 8.2 AI-Based Product Support 8.3 AI-Assisted Customer Success 8.4 Personalized Customer Support 8.5 Smart Customer Crowd Management	<b>13 Human Resources</b> 13.1 Intelligent Career Support 13.2 AI-Based Personal Coaching 13.3 AI-Based Performance Reviews 13.4 Smart Recruiting and Workforce 13.5 AI-Based Compensation Management	<b>18 Military and Security</b> 18.1 Advanced Surveillance 18.2 AI for Cybersecurity 18.3 AI-Based Law Enforcement 18.4 AI Support for Warfighter 18.5 AI-Based Weapons and Deep Fakes
<b>4 Business Operations</b> 4.1 Smart Supply Chain Optimization 4.2 Intelligent Inventory Optimization 4.3 AI-Based Demand Forecasting 4.4 Intelligent Quality Control 4.5 Smart Contracts	<b>9 Data Analysis</b> 9.1 AI-Based Predictive Modeling 9.2 AI-Based Business Intelligence 9.3 AI-Based Data Normalization 9.4 Intelligent Big Data Analytics 9.5 Smart Simulated Data Generation	<b>14 Information Technology</b> 14.1 AI-Based IT Support 14.2 AI-Based IT Design 14.3 Advanced AI-Based Search 14.4 AI-Powered Apps 14.5 AI-Generated Websites	<b>19 Software Process</b> 19.1 AI-Based Coding Support 19.2 Smart Software Lifecycle Support 19.3 AI-Based Software Quality 19.4 AI-Based Test Case Generation 19.5 Intelligent Software Test and Analysis
<b>5 Commerce</b> 5.1 AI Support for Retail 5.2 AI Support for Warehousing 5.3 Intelligent Product Exchanges 5.4 Smart Auctions 5.5 AI-Based Professional Services	<b>10 Education</b> 10.1 AI-Based Remote Learning 10.2 AI-Based Remote Teaching 10.3 Smart Tailored Education 10.4 Smart Learning Management 10.5 AI-Based Standardized Testing	<b>15 Machines</b> 15.1 Next Generation Robots 15.2 Computer Vision 15.3 Computer Speech 15.4 Autonomous Internet of Things 15.5 Agricultural Robots	<b>20 Transportation</b> 20.1 AI-Based Transportation Logistics 20.2 Personalized Transportation 20.3 Smart Mapping Tools 20.4 AI-Based Flight Operations 20.5 AI-Based Rail Operations

Figure 1. TAG AI Taxonomy

### Overview of AI for Biotechnology

The following emerging global commercial opportunities involving AI for biotechnology are covered in this report, including the listing of several viable commercial entities providing solutions on the market today:

- AI-assisted drug discovery is revolutionizing the pharmaceutical industry by utilizing algorithms to sift through extensive biochemical data, enabling the rapid identification of promising drug candidates. These intelligent systems also simulate drug interactions virtually, minimizing reliance on physical trials in the early stages.
- Personalized medicine is becoming a reality with AI's capacity to analyze individual genetic and clinical data, crafting bespoke treatment plans that increase the likelihood of successful outcomes. AI's predictive power also plays a crucial role in pinpointing

which patients will benefit from certain medications, thus personalizing healthcare like never before.

- In intelligent medical diagnostics, AI shines by providing unparalleled precision in interpreting medical imaging, leading to earlier and more accurate disease detection. Beyond images, AI's prowess in understanding and extracting pertinent information from written clinical notes is enhancing diagnostic processes.
- AI-based health analytics extend its benefits beyond individual care to public health, where it examines vast health record datasets to discern patterns, predict disease outbreaks, and inform proactive healthcare strategies. It also assists in refining healthcare operations by analyzing patient flows and resource allocations, ensuring better healthcare management.
- Intelligent clinical trial support through AI is transforming how clinical studies are conducted, from patient selection to real-time monitoring of trial progress. By predicting potential outcomes and swiftly recognizing both positive responses and adverse effects, AI is making clinical trials more efficient and adaptive.

### Focus Area: AI-Assisted Drug Discovery

AI-assisted drug discovery is a major advance in the pharmaceutical industry, streamlining a labor-intensive and time-consuming process. At its core, this innovation combines the power of artificial intelligence with vast datasets and advanced computational techniques to expedite the identification and development of new medications.

The process begins with data aggregation, where AI algorithms gather and synthesize a multitude of information sources, such as biological databases, chemical libraries, and medical literature. This data pool is then analyzed to identify potential drug candidates. Machine learning models, often powered by deep learning, play a pivotal role in predicting the molecular properties and biological activities of these candidates.

AI's predictive capabilities not only reduce the guesswork involved in drug discovery but also help researchers prioritize compounds for further investigation. Virtual screening and molecular docking simulations allow scientists to assess how these compounds interact with specific target proteins, predicting their potential efficacy and safety. As a result, the drug development timeline is shortened, saving both time and resources. Additionally, AI can uncover previously unnoticed connections and patterns within the data, leading to drug targets and therapeutic approaches.

Ultimately, AI-assisted drug discovery is important to patients in need of new treatments, as it accelerates the translation of scientific insights into life-saving medications, bringing us closer to conquering diseases that have eluded medical solutions. Such synergy between human expertise and artificial intelligence is reshaping the pharmaceutical industry and offering new avenues for innovation in healthcare.

### Focus Area: Personalized Medicine

AI-assisted personalized medicine is a major aspect of healthcare innovation, reshaping the way doctors diagnose and treat diseases. This transformative approach harnesses the power of artificial intelligence to tailor medical treatments and interventions to the unique genetic, physiological, and lifestyle characteristics of individual patients.

At the heart of AI-assisted personalized medicine is genomics. High-throughput DNA sequencing technologies generate vast amounts of genetic data, which AI algorithms analyze to identify genetic variations and mutations associated with specific diseases or drug responses. These insights enable healthcare providers to develop a personalized genetic profile for each patient.

With this genetic profile in hand, AI systems can then recommend the most appropriate treatments or therapies, optimizing their effectiveness while minimizing potential side effects. Machine learning models can predict how patients are likely to respond to different medications, allowing for the selection of the most suitable drug and dosage.

Beyond genomics, AI can incorporate data from wearable devices, electronic health records, and even lifestyle factors like diet and exercise. This approach ensures that healthcare recommendations are holistic and tailored to each patient's unique circumstances.

AI-assisted personalized medicine not only enhances treatment outcomes but also enables early disease detection and prevention. By continuously analyzing patient data, AI systems can identify subtle changes that may indicate the onset of a medical condition, allowing for timely intervention.

### Focus Area: Intelligent Medical Diagnostics

AI-assisted intelligent medical diagnostics also leverages the capabilities of artificial intelligence to enhance the accuracy and efficiency of disease detection and diagnosis. The process begins with the collection of patient data, which can include medical history, symptoms, imaging scans, and laboratory results. AI algorithms then analyze this dataset, using machine learning techniques to recognize patterns and anomalies that might not be apparent to human practitioners.

For medical imaging, AI can scrutinize X-rays, MRIs, CT scans, and pathology slides with remarkable precision. It can identify subtle abnormalities or lesions in images, helping radiologists and pathologists make more accurate and timely diagnoses. This is particularly beneficial in fields like radiology, where AI can assist in the early detection of conditions such as cancer, fractures, or neurological disorders.

For non-imaging diagnostics, AI can process a patient's symptoms and clinical data to generate differential diagnoses or recommend further tests. It can also assess the likelihood of specific diseases based on epidemiological data and medical literature, providing valuable decision support to healthcare professionals. Furthermore, AI systems continuously learn and adapt

from new data, improving their diagnostic accuracy over time. They can also access a vast knowledge base of medical research and guidelines, ensuring that diagnoses are in line with the latest medical advancements.

Overall, AI-assisted intelligent medical diagnostics holds the potential to reduce diagnostic errors, expedite the diagnostic process, and improve patient outcomes. By combining the strengths of machine learning with the expertise of medical professionals, it represents a significant step forward in diagnosis and treatment.

### Focus Area: AI-Based Health Analytics

AI-based health analytics is revolutionizing how healthcare organizations manage and utilize data to improve patient care, optimize operations, and make informed decisions. This technology leverages artificial intelligence to extract insights from healthcare data. The process begins with data collection from various sources within the healthcare ecosystem, including electronic health records (EHRs), medical devices, wearables, and administrative databases. AI algorithms then process and analyze this data, employing machine learning and deep learning techniques to identify patterns, trends, and correlations.

In clinical settings, AI-based health analytics can assist in patient risk assessment, predicting disease onset, and recommending personalized treatment plans. For instance, it can analyze patient histories to identify individuals at risk of chronic conditions or suggest tailored interventions based on genetic profiles and lifestyle factors. In hospital operations, AI can optimize resource allocation, bed management, and staff scheduling. It can predict patient admission rates, helping hospitals prepare for surges in demand, and reduce readmission rates by identifying patients at risk of complications.

Additionally, AI-powered natural language processing (NLP) can extract insights from unstructured data, such as clinical notes and medical literature, facilitating evidence-based decision-making by healthcare professionals. AI-based health analytics is also pivotal in public health, enabling early detection of disease outbreaks through data analysis and monitoring of social media trends. It aids in the development of targeted public health campaigns and resource allocation during crises.

### Focus Area: Intelligent Clinical Trial Support

AI-based intelligent clinical trial support is improving medical research and drug development, making the process more efficient, cost-effective, and patient-centric. This approach leverages artificial intelligence to streamline various aspects of clinical trials. The process begins with the design phase, where AI assists in selecting trial endpoints, patient populations, and recruitment strategies. Machine learning algorithms analyze historical trial data and scientific literature to suggest optimal trial designs that are more likely to yield meaningful results.

Patient recruitment, a challenging aspect of clinical trials, benefits from AI. Intelligent algorithms can identify potential participants by scanning electronic health records and other

data sources, helping trial organizers find suitable candidates faster and at a lower cost. During the trial itself, AI monitors and analyzes patient data in real-time, detecting adverse events and protocol deviations. This not only ensures participant safety but also allows for rapid adjustments to trial protocols, minimizing delays.

AI can also predict patient dropout rates and stratify participants based on their response to treatment, aiding in the design of adaptive trials that allocate resources more efficiently. Furthermore, AI-enabled natural language processing can sift through volumes of scientific literature to keep researchers informed about the latest developments in their field, ensuring that trials are conducted with the most up-to-date knowledge.

AI-based intelligent clinical trial support is a game-changer in the pharmaceutical and medical research industries. It accelerates the drug development process, reduces costs, and enhances patient safety, ultimately bringing innovative treatments to market faster and improving the overall quality of healthcare.

### Companies and Contributions

The companies listed below emerged as part of our research at TAG. Our goal in listing these fine firms is to provide a starting point for buyers, advocates, stakeholders, and researchers trying to make sense of the commercial landscape for artificial intelligence as a means for driving toward improved methods for biotechnology.

### AI-Assisted Drug Discovery Vendors

1. [AMPLY Discovery](#): AMPLY Discovery uses machine learning and synthetic biology to mine vast biological data to discover novel drug and nutraceutical candidates.
2. [Atavistik](#): Atavistik is harnessing the power of protein-metabolite interactions to add a new lens to drug discovery.
3. [Atomwise](#): Atomwise employs deep learning for structure-based drug design, enabling the rapid screening of potential drug compounds.
4. [BenevolentAI](#): Using AI-driven knowledge graphs, BenevolentAI seeks to uncover novel drug candidates and repurpose existing drugs for new therapeutic uses.
5. [Cloud Pharmaceuticals](#): Cloud Pharmaceuticals employs AI-driven molecular modeling to design novel drug candidates with a focus on efficiency and cost-effectiveness.
6. [Data2Discovery](#): Data2Discovery's patent-pending knowledge graph and advanced data science technologies are being used to find breakthrough insights.
7. [Deep Genomics](#): Deep Genomics integrates AI and genomics to uncover disease-causing genetic mutations and identify potential therapeutic interventions.
8. [Exscientia](#): Exscientia is working to combine the power of AI and human creativity to make safer and more sophisticated drugs available to all.
9. [Genesis Therapeutics](#): Genesis is working to develop new medicines using an advanced molecular AI platform.
10. [Healx](#): Healx focuses on repurposing existing drugs for rare diseases using AI algorithms to match compounds with potential therapeutic benefits.

11. [Iktos](#): Iktos combines AI and generative chemistry to design drug compounds with improved properties and higher success rates in preclinical testing.
12. [Insilico Medicine](#): Leveraging AI for drug discovery, Insilico Medicine specializes in generative chemistry, target identification, and predictive biology to accelerate pharmaceutical research.
13. [PathAI](#): PathAI utilizes deep learning to assist pathologists in diagnosing diseases more accurately through the analysis of pathology slides.
14. [Pfizer](#): The large company is exploring means for using AI responsibly in the development of new drugs.
15. [Pharnext](#): Pharnext employs AI to identify synergistic combinations of existing drugs, known as PLEODRUGs, for the treatment of various diseases.
16. [Polaris Quantum Biotech](#): This company is offering the first quantum empowered SaaS for Drug Discovery.
17. [Recursion Pharmaceuticals](#): Recursion combines AI and experimental biology to discover new treatments by analyzing cellular imagery and genetic data.
18. [Relay Therapeutics](#): Relay Therapeutics puts protein motion at the heart of drug discovery to dramatically expand therapeutic possibilities.
19. [Standigm](#): Standigm is a workflow AI-driven drug discovery company with offices in Cambridge, UK, Cambridge, MA, USA, and Seoul, South Korea.
20. [Turbine.AI](#): Turbine.AI offers AI-powered solutions for drug discovery, including target identification, lead optimization, and patient stratification.
21. [Unlearn](#): Unlearn develops generative machine learning methods to predict individual health outcomes.
22. [Valo Health](#): Valo Health employs machine learning to optimize drug design, helping pharmaceutical companies identify promising compounds.
23. [Xilis](#): Xilis is developing next-generation technologies to guide precision therapy for cancer patients and accelerate drug discovery and development.

## Personalized Medicine Vendors

1. [Aitia](#): Aitia utilizes AI and causal machine learning to uncover insights from patient data, guiding personalized treatment decisions and drug development.
2. [BluePrint Genetics](#): BluePrint Genetics employs AI for genetic diagnostics, supporting clinicians in identifying rare genetic diseases and tailoring patient care.
3. [Congenica](#): Congenica's AI-driven platform aids in diagnosing rare genetic diseases, providing clinicians with actionable information for patient management.
4. [Exact Sciences](#): Exact Sciences integrates AI into molecular diagnostics to assist oncologists in making treatment recommendations for cancer patients.
5. [Fabric Genomics](#): Fabric Genomics combines AI with genomic data analysis to support clinical decision-making for inherited diseases and cancer.
6. [Foundation Medicine](#): Foundation Medicine employs genomic profiling and AI to assist oncologists in tailoring cancer therapies based on the genetic makeup of individual patients.



7. [Freenome](#): Freenome combines AI and liquid biopsy technology to detect cancer early and guide personalized treatment decisions.
8. [Genome Medical](#): Genome Medical uses AI to provide virtual genetic counseling and clinical genomic support for patients and healthcare providers.
9. [GenomOncology](#): GenomOncology's AI platform assists oncologists in matching cancer patients with optimal targeted therapies and clinical trials.
10. [Genoox](#): Genoox uses AI and genomic data interpretation to help clinicians identify genetic variations and customize treatment plans for patients.
11. [Kindbody](#): Kindbody utilizes AI-driven genomics to help clinicians identify genetic markers, assess disease risk, and tailor treatment strategies.
12. [Personalis](#): Personalis employs AI to analyze cancer genomics data, aiding oncologists in optimizing immunotherapy and targeted therapy options.
13. [PierianDx](#): PierianDx provides AI-powered genomic informatics solutions for healthcare institutions to interpret and apply genomic data in personalized medicine.
14. [Prenetics](#): Prenetics offers AI-assisted genetic testing and personalized health solutions, helping individuals make informed health and lifestyle choices based on their genetic profiles.
15. [SOPHiA Genetics](#): SOPHiA Genetics offers AI-driven clinical genomics solutions to aid in diagnosing and treating inherited disorders and cancer.
16. [Tempus](#): Tempus harnesses AI to analyze clinical and molecular data, providing insights that inform personalized treatment decisions for cancer patients.
17. [Variantyx](#): Variantyx provides AI-powered genetic testing and interpretation services for rare and inherited diseases, enabling personalized healthcare plans.

### Intelligent Medical Diagnostics Vendors

1. [Aidoc](#): Aidoc specializes in AI-powered radiology solutions, rapidly identifying abnormalities in medical imaging scans to aid radiologists in diagnosis.
2. [Aidpath](#): Aidpath leverages AI for histopathology analysis, supporting pathologists in diagnosing diseases more accurately and efficiently.
3. [Butterfly Network](#): Butterfly Network utilizes AI in handheld ultrasound devices, enabling quick and accessible medical imaging for various clinical applications.
4. [Deep 6 AI](#): Deep 6 AI offers AI-powered patient recruitment solutions for clinical trials, enabling healthcare organizations to identify suitable participants more efficiently.
5. [DeepHealth](#): DeepHealth offers AI-powered diagnostic tools for radiologists, assisting in the detection and characterization of various conditions.
6. [Digital Diagnostics](#): Digital Diagnostics offers AI-based diagnostic solutions for diabetic retinopathy, providing autonomous detection of this eye condition.
7. [Embold Health](#): Embold Health utilizes AI and data analytics to assist healthcare providers in making more accurate and cost-effective diagnostic and treatment decisions.
8. [Enlitic](#): Enlitic's AI-driven platform analyzes medical images to help radiologists and healthcare providers make more informed diagnostic decisions.

9. [Google Health](#): Google Health incorporates AI into medical imaging and diagnostic tools, supporting healthcare professionals in diagnosing diseases.
10. [MaxQ AI](#): MaxQ AI specializes in AI solutions for the interpretation of medical imaging, particularly for stroke and brain hemorrhage detection.
11. [Niramai](#): Niramai employs AI for breast cancer screening, offering non-invasive and radiation-free detection solutions for early-stage cancer.
12. [Paige](#): Paige utilizes AI in pathology to assist pathologists in diagnosing cancer and other diseases more efficiently.
13. [PathVisio](#): PathVisio uses AI to analyze pathology slides and help pathologists detect and characterize diseases, including cancer.
14. [Proscia](#): Proscia employs AI for digital pathology, streamlining the analysis of pathology slides and aiding in cancer diagnosis.
15. [Quibim](#): Quibim specializes in AI-based medical image analysis for quantitative assessment of diseases, such as tumors and osteoporosis.
16. [Subtle Medical](#): Subtle Medical uses AI to enhance medical imaging by reducing scan times and radiation exposure while maintaining image quality.
17. [Ultromics](#): Ultromics employs AI to enhance echocardiography analysis, aiding in the early detection of heart diseases.
18. [Zebra Medical Vision](#): Zebra Medical Vision uses AI algorithms to analyze medical imaging data, assisting in the early detection of various diseases.

## AI-Based Health Analytics Vendors

1. [Aetion](#): Aetion applies AI to real-world evidence to help healthcare organizations assess the safety and effectiveness of medical interventions.
2. [Apixio](#): Apixio (merged with Claimlogiq) specializes in using AI to extract insights from unstructured healthcare data, supporting providers and payers in risk adjustment and quality measurement.
3. [Datavant](#): Datavant uses AI to connect and de-identify healthcare data, enabling secure data sharing for research and analytics.
4. [Availity](#): Availity uses AI to transform clinical data into actionable insights, enhancing quality measurement and care coordination for healthcare organizations.
5. [Edifecs](#): Edifecs (acquired Health Fidelity) uses AI-driven natural language processing to improve coding accuracy and risk adjustment in healthcare coding and documentation.
6. [Health Catalyst](#): Health Catalyst provides AI-driven analytics solutions to healthcare organizations, enabling data-driven insights and decision-making for better patient outcomes.
7. [HealthVerity](#): HealthVerity employs AI for data governance and insights, helping healthcare organizations securely share and analyze patient data for research and decision-making.
8. [Human API](#): Human API (part of LexisNexis) offers an AI-powered platform that enables healthcare organizations to access and integrate patient data from various sources.

9. [Innovaccer](#): Innovaccer leverages AI for healthcare data integration and analytics, enabling care coordination, population health management, and cost optimization.
10. [Komodo Health](#): Komodo Health uses AI to analyze real-world healthcare data, providing insights for life sciences companies and healthcare organizations.
11. [Waystar](#): Waystar offers an AI-powered automation platform for healthcare operations, streamlining administrative tasks and reducing operational costs.
12. [OM1](#): OM1 uses AI to analyze real-world clinical data, supporting healthcare providers and life sciences companies in improving patient outcomes.
13. [Redox](#): Redox offers an interoperability platform that uses AI to standardize and exchange healthcare data, facilitating seamless data sharing across health systems.
14. [Saama Technologies](#): Saama Technologies provides advanced analytics and AI solutions for life sciences and healthcare to accelerate clinical trials and data-driven decision-making.
15. [Tegria](#): Tegria (acquired KenSci) applies machine learning and AI to patient data for predictive analytics, supporting healthcare providers in improving patient outcomes.

## Intelligent Clinical Trial Support Vendors

1. [Antidote](#): Antidote uses AI to match patients with clinical trials, simplifying the patient recruitment process for healthcare organizations.
2. [Clinerion](#): Clinerion employs AI to accelerate patient identification and recruitment for clinical trials, improving trial efficiency and speed.
3. [CliniOps](#): CliniOps provides AI-powered clinical trial management software to streamline data collection, monitoring, and reporting.
4. [Medable](#): Medable uses AI and digital technologies to support decentralized and patient-centric clinical trials, improving trial access and engagement.
5. [Medidata](#) (a Dassault Systèmes company): Medidata offers AI-enhanced clinical trial solutions, streamlining trial management, patient recruitment, and data analytics.
6. [Paradigm](#): Paradigm (acquired Deep Lens) employs AI to automate patient identification for clinical trials, improving patient access to cutting-edge treatments.
7. [Phesi](#): Phesi utilizes AI and data analytics to optimize clinical trial design, patient recruitment, and trial execution for life sciences companies.
8. [Science 37](#): Science 37 leverages AI and telemedicine to conduct decentralized clinical trials, making participation more accessible and patient centric.
9. [THREAD Research](#): THREAD Research offers an AI-based platform for decentralized clinical trials, enabling remote data collection and patient engagement.
10. [Trialfacts](#): Trialfacts employs AI to enhance patient recruitment for clinical trials, leveraging digital marketing strategies and analytics.
11. [TriNetX](#): TriNetX offers an AI-powered global health research network to streamline clinical trial design, recruitment, and real-world evidence generation for healthcare organizations.

## About TAG

TAG is a trusted research and advisory company that provides insights and recommendations in cybersecurity, artificial intelligence, and climate science to thousands of commercial solution providers and Fortune 500 enterprises. Founded in 2016 and headquartered in New York City, TAG bucks the trend of pay-for-play research by offering unbiased and in-depth guidance, market analysis, project consulting, and personalized content—all from a practitioner perspective.

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