IDC MarketScape

IDC MarketScape: Worldwide Life Sciences R&D AI (Including GenAI) in Clinical Trials 2025 Vendor Assessment

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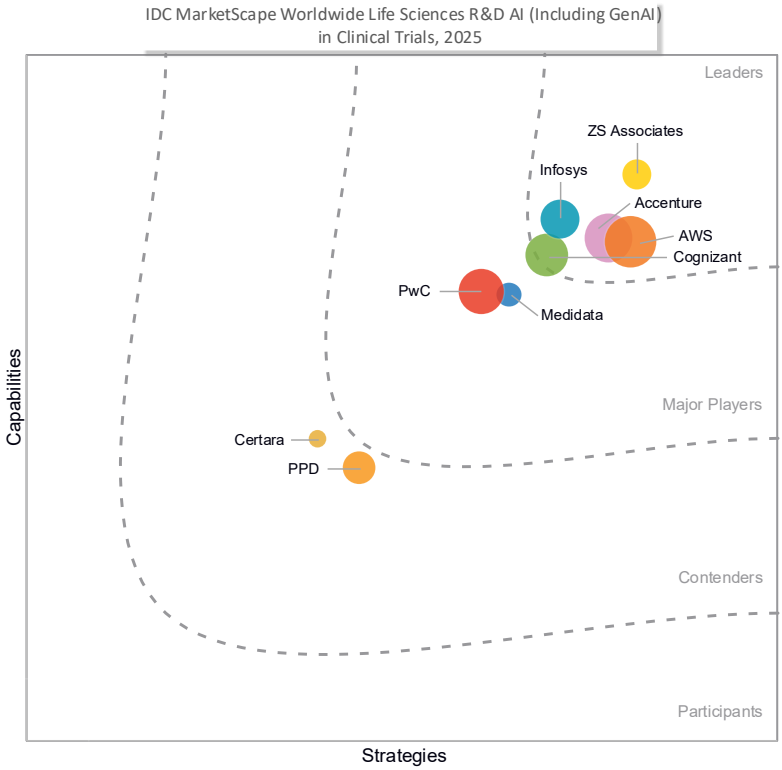
THIS EXCERPT FEATURES ZS ASSOCIATES AS A LEADER

IDC MARKETSCAPE FIGURE

FIGURE 1

IDC MarketScape Worldwide Life Sciences R&D AI (Including GenAI) in Clinical Trials Vendor Assessment



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See the Appendix for detailed methodology, market definition, and scoring criteria.

ABOUT THIS EXCERPT

The content for this excerpt was taken directly from IDC MarketScape: Worldwide Life Sciences R&D AI (Including GenAI) in Clinical Trials 2025 Vendor Assessment (Doc # US53704325).

IDC OPINION

Times are changing for sure. Earlier, every pharma CEO used to be asked one question: "What's your pipeline?" But today, to quote Mikael Dolsten, former chief scientific officer and president, Worldwide R&D and Medical, at Pfizer, "Every pharma CEO is being asked two questions: 'What's your pipeline, and what's your AI strategy?'" AI has become a critical game changer for the life sciences industry, and the C-suite is listening.

Today, the life sciences industry is focusing on core fundamentals:

- Enterprise data readiness
- Use case prioritization strategy
- Enterprisewide implementation strategy
- Change management strategy
- Impact assessment of AI implementation initiatives on the workforce
- Building and executing a road map for the adoption of AI/GenAI across the clinical trial value chain
- Transforming clinical workflows
- Demonstrating ROI
- Redefining the business process, team structures, and even job definitions
- Training, training, and training

Executive sponsorship, strong cross-functional collaboration, and a risk-taking and innovation-centric culture will be critical to success.

Two years down the line, organizational AI strategies will mature as AI adoption becomes more mainstream. The focus will be on assessing the sustainability and scalability of AI initiatives, resetting priority use cases, and ensuring alignment with strategic objectives. There will be greater scrutiny on ethical AI practices and on addressing bias and digital inequity. The regulatory landscape will have stabilized, and there will be heightened demands for transparency in AI decision-making and ensuring accountability and trustworthiness in automated processes. With some AI use cases,

adoption will scale exponentially, and the democratization of access to AI will be key. While the focus will be on efficiency gains and cost savings, transforming customer experiences will become a priority. Digital workers will become integral parts of teams, and human-AI collaboration will become a part of business as usual.

While there's a high degree of optimism about the immense potential of AI, it doesn't come without its own challenges.

Technology Vendor AI Challenges

- Though AI and tech are evolving at an exponential rate, many organizations are still stuck in the POC/plotitis mode. Concerns regarding the potential risks frequently result in leadership inertia toward scaling a solution.
- Owing to the extensive hype about GenAI, in some cases, and an overaggressive pitch from vendors, on occasion, the life sciences industry has ended up having somewhat unrealistic expectations of vendors. Request for proposals (RFPs) can be really demanding, placing exceedingly high pressure on vendors to deliver.
- Vendors struggle to stay at the leading edge of technology owing to the rapid pace at which technology is evolving.
- The demand for AI has started to outpace existing capabilities, putting pressure on tech vendors to ramp up their hiring and upskilling efforts.
- Functional silos and power towers within client organizations often impact the enterprisewide implementation of AI initiatives.
- With the rapid pace at which AI is evolving, hiring people with the right skill set is especially challenging, and it is even harder to find resources with a high level of bilingual fluency across AI and clinical development.
- The lack of deep expertise in data stewardship, including data interoperability, quality, residency, and sovereignty issues is challenging.
- Uncertainty exists about the regulatory landscape regarding the use of AI.
- There are variable and evolving AI strategies across pharmas and the need to keep adapting to the same.
- The ability to embed AI into existing workflows is a challenge.
- Concerns around data security are heightened as data fluidity increases.

Life Sciences Industry AI Challenges

- As the diversity and complexity of data sources continue to grow, data integration and standardization become increasingly challenging. AI is all about the quality of the data and ensuring that data consistency, accuracy, and interoperability is critical.

- Lack of consistency exists in expectations regarding how AI should operate. Varying expectations create challenges with scaling adoption.
- Owing to significant geopolitical turmoil and continuously evolving global regulations related to AI, data residency and sovereignty, as well as data privacy and security, IT leadership is under considerable pressure to establish responsible AI frameworks and to ensure ongoing security testing to guard against new threats, potentially introduced by AI tools.
- The life sciences industry deals with patients' lives. Care needs to be taken to ensure transparency, address privacy concerns, and ensure the safety of trial participants.
- While AI can play a key role in recruiting patients, transforming patient experiences, and scaling patient retention as well, efforts need to be made to ensure that AI-enabled solutions are not expanding the digital divide.
- While the senior leadership team is typically in a hurry to adopt, the workforce, more often than not, has high degrees of skepticism, a lack of awareness, and concerns regarding job loss, thus often defeating GenAI implementation initiatives. ROI is led by adoption, and change management is a critical component for scaling adoption.
- The lack of centralized governance, suboptimal use case prioritization frameworks, and the lack of a strategic portfolio-driven strategy has led to fragmented AI adoption, preventing scalability and integration across clinical functions. A portfolio-driven approach needs to be implemented to ensure that AI investments are aligned with clear business and clinical objectives.
- The availability of training data becomes a clear limitation for small AI start-ups that lack access to sponsor, CRO, or TechBio data, effectively impacting the quality of AI solutions that are developed.
- While multimodal and multimodel is the current strategy, there is often some ambiguity in choosing the right model for each use case.
- Cybersecurity concerns and concerns regarding data residency and data sovereignty are increasing with growing geopolitical tensions across the globe.
- Experienced developers that bring both AI expertise and the knowledge of clinical development to the table are scarce.
- Not integrating AI with high-value business processes and clinical workflows can make it challenging to generate ROI.
- The lack of collaboration between regulators and the life sciences industry to build cohesive data-sharing frameworks, and well-defined data standards, limits the effective use of data for developing AI solutions for clinical trials.

Some of the key metrics to measure the success of AI/GenAI implementation initiatives in the life sciences industry are:

- Productivity gains, including a reduction in time (and spend)
  - Sample processing turnaround time (TAT)
  - Hit-to-lead cycle time
  - Protocol development time
  - Site activation time
  - Enrollment timelines
  - Time to market
  - Time to novel insight generation
  - Time for novel target identification, lead optimization
- Improvement in accuracy/quality in areas such as:
  - AI-driven compound efficacy and toxicity prediction models
  - Demand forecasting
  - Reduction in the number of data errors/data clarifications required
  - Reduction in protocol deviations
  - Reduction in the rejection rate from health authorities post-submission
- Improvement in customer experience
  - User adoption and experience (adoption rate, satisfaction score)
  - Reduced subject drop-out rate
  - Improved experience of scientists in the wet lab
  - Improved healthcare provider engagement
  - The number of digital workers created
  - Reduction in head count
- The overall ability to address unmet patient needs and improve clinical outcomes

For the life sciences industry, this is a time of experimentation, this is a time of innovation, and the industry is watchfully and warily testing the waters, yet is raring to go all in on the AI narrative.

IDC MARKETSCAPE VENDOR INCLUSION CRITERIA

IDC frequently has unique visibility into vendor selection processes within life sciences companies through clients and contacts in the industry. For a vendor to be considered for inclusion in this study, the vendor's services must have been significantly evaluated for the potential to engage clients within the target IDC MarketScape space.

Further research and due diligence were then conducted to narrow the list of vendors to only those that IDC views as legitimate contenders for future deals within the life science space, based on an assessment of the vendor's capability in providing technology solutions and consulting services to support the implementation of AI/GenAI in clinical trials.

Vendor must meet the three key inclusion criteria:

- Provide solutions and consulting services involving the application of AI/GenAI in clinical trials.
- Have at least five customers where they have successfully implemented AI/GenAI in clinical trials in the past 12 months as of December 31, 2024.
- H3ave a minimum company revenue of $200 million.

The nine life sciences R&D AI/GenAI in clinical trials solutions and consulting services providers selected to participate in this study are:

- AWS
- Accenture
- Certara
- Cognizant
- Infosys
- Medidata
- PPD (Thermo Fisher Scientific)
- PwC
- ZS Associates

ADVICE FOR TECHNOLOGY BUYERS

The life sciences industry is definitely seeing the need to invest in AI solutions. It is recognizing that this will be an ecosystem play, and the life sciences industry is partnering with strategic technology solution providers, large system implementation partners, hyperscalers, data providers, small but truly innovative technology start-ups, infrastructure providers, and more. Choosing the right AI partners is critical for life sciences companies that are looking to leverage this transformative technology.

In IDC's view of the AI/GenAI in clinical trials technology solutions and consulting services ecosystem, key attributes that life sciences companies are looking for in their preferred AI/GenAI in clinical trials solution providers include:

- Start by defining your specific needs and goals. Clearly elucidate the problems you want to solve, the workflows you wish to enhance, and the business value you expect to generate. It could be automating the generation of a clinical study report, or it could be transforming lab operations, or optimizing the site selection process. Stay focused, identify your greatest pain points, and ensure that AI is the right answer to solve those problems before venturing on that journey.
- Decide whether you are looking for embedded AI solutions across clinical workflows or for niche AI solutions to solve specific problems across your clinical trials.
- Prioritize life sciences' industry-specific expertise. Seek a partner with a deep understanding of the life sciences industry, the industry's unique challenges such as patient recruitment and retention, and accelerating regulatory submission while ensuring regulatory compliance.
- Ensure that your partner brings to the table solutions and technical expertise that meet your needs. Determine not only whether your partner has the right AI experts on board but also whether it has the right ecosystem of partnerships to support you with your data/platform/model needs. Ensure that your partner can bring to you GxP-compliant frameworks and solutions that are robust and scalable and comply with regulations like HIPAA, GDPR, and other applicable data protection laws.
- Scrutinize your partners' data handling practices, security measures, and compliance with ethical AI principles.
- Evaluate your partner's capacity to handle growing data volumes and evolving needs and its ability to align with your road map. Ensure its solutions can seamlessly integrate with your existing systems and workflows, minimizing disruption and maximizing efficiency.
- Determine whether your partner offers customizable AI solutions or pure-play off-the-shelf options.
- Address the flexibility of your partner to include clauses around tariff-resilient cost structures and to build in risk-sharing frameworks in its contracts.
- Ensure transparency and make your AI technology partner an integral part of your AI strategy.
- Ensure compatibility of corporate cultures.
- Implement focused change management initiatives — without adoption, even the best AI solutions will not yield ROI.
- Ensure the availability of strong referenceable clients.

VENDOR SUMMARY PROFILE

This section briefly explains IDC's key observations resulting in a vendor's position in the IDC MarketScape. While every vendor is evaluated against each of the criteria outlined in the Appendix, the description here provides a summary of each vendor's strengths and challenges.

ZS Associates

After a close evaluation of ZS Associates' offerings and capabilities, IDC has positioned the company in the Leaders category of this 2025 IDC MarketScape for worldwide life sciences R&D AI (including GenAI) in clinical trials.

Headquartered in Evanston, Illinois, ZS has served the life sciences industry for over 40 years. It has over 37 delivery centers serving clients in 90 countries. ZS employs over 13,000 people, with close to 10,000 dedicated to life sciences, with 70% focused on tech. ZS has over 600 senior leaders with an average of 12 years of work experience in life sciences, including 150 M.D.s and PhDs, with R&D experience across 120 disease areas. It also has a vast pool of data engineers, data scientists, and certified cloud technologists, as well as a dedicated AI center of excellence. About 90% of ZS' life sciences business is derived from companies with revenue over $1 billion, with about 60% of its customers coming from the United States and a fifth from Europe. ZS has over 550 life sciences customers, two-thirds of which represent pharma, and the rest represent medical devices. ZS reports that it has over 3,000 active projects with close to 200 pharma customers. In addition:

- **Strategic initiatives:** ZS envisions an AI-driven transformation wave in drug development enabled by AI being embedded across clinical trial workflows. ZS is investing in design intelligence, PTRS prediction, patient and site burden algorithms, RWD-based IE criteria optimization algorithms, operational and quality risk prediction algorithms, patient and site digital twins, and so forth, which are bringing clients closer to *in silico* trial design. It is reenvisioning clinical data management, statistical programming, and biostatistics as a holistic agentic AI–enabled workflow with experts in the loop. It is supporting clients in building multimodal R&D data platforms, curating data products using AI/GenAI and human-in-the-loop and is integrating submission and exploratory pathways to unlock AI's full potential in clinical development. It is integrating commercial and clinical ecosystems, leveraging a unified CRM to empower primary care physicians as trial sites, ultimately reducing enrollment timelines. It aims to cut data management efforts by building end-to-end AI-powered data flows. ZS is building capabilities to drive submission-ready data, available upon data collection, and is automating the authoring of submission documents, expediting

approvals. ZS invested over $100 million in R&D, focusing heavily on GenAI and expects the GenAI investment to grow by 250% in 2025.

- **M&As/partnerships:** In 2023, ZS acquired Trials.ai to use its AI to help clinical development teams design smarter studies. It has established an exclusive partnership with Intelligencia.AI, an artificial intelligence company pioneering the use of machine learning to assess, quantify, and reduce risk during clinical development and guide pipeline decision-making. In 2022, it acquired Intomics, a bioinformatics and systems biology company, and made a strategic investment in IgniteData to enhance interoperability between electronic health records (EHRs) and electronic data capture (EDC) systems. In 2021, it acquired Medullan, a digital health company. It also has partnerships with AWS, Medidata, Snowflake, Appian, Databricks, Informatica, Veeva, and Salesforce.
- **Pricing models:** ZS' pricing models include fixed cost, license based, outcome based, and capacity based when providing agile product teams.

Strengths

ZS brings to the table business advisory, domain consulting, and technology consulting, in addition to its AI accelerators to scale adoption and drive value realization. Over 90% of ZS' business is related to life sciences, enabling ZS to embed deep life sciences expertise in building out its AI accelerators. Its accelerators are progressively enriched to ensure that they remain relevant. ZS' business advisory and tech transformation teams help clients determine the right areas for automation and implement these solutions, leveraging ZS' AI frameworks. ZS builds foundational AI components, and reusable accelerators that can be leveraged across multiple clinical trial applications, allowing clients to realize value faster while maintaining flexibility for future innovation.

Its change management specialists help organizations embed these AI-powered solutions into functional workflows, ensuring adoption and scalability. ZS offers a scalable AI architecture framework, and comprehensive domain-rich ontologies and metadata frameworks that integrate structured and unstructured data, enhancing model accuracy and operational efficiency. Its AI agent solutions provide real-time insights and decision support across diverse clinical functions. About 65 customers, primarily pharmas and biotechs, are using ZS' AI and GenAI clinical trials implementation services/solutions currently, with about 90% having revenue over $1 billion.

ZS offers a wide range of GenAI capabilities across the clinical trial value chain, including site selection, patient engagement and retention, statistical analysis, pharmacovigilance, clinical data management, risk-based quality management, real-world data analysis, automated document generation, document extraction for generating competitive intelligence, biomarker identification, and clinical trial supply

chain. It is training large language models to generate synthetic data to design virtual patient cohorts/digital twins. It offers AI capabilities for patient recruitment and regulatory intelligence and protocol optimization through the development of synthetic protocols. Scriptiva is its content authoring accelerator and Automap is its accelerator for data transformation. ZS has funded market research across 20,000 patients for its Patient Experience Bank and offers a data-as-a-service model where it clubs its industry-level research with its own market research. AI is used to optimize clinical trial design and site selection using this experience bank. Six customers are currently using this capability.

ZS reports that its AI models achieve 80–95% accuracy, depending on the complexity and the risk associated with the use cases, and a 5–20% improvement in the rate of generating novel insights. Some of ZS' AI-enabled accelerators include Trials.ai, its digital protocol digitization and authoring solution, its document authoring and generation platform, that spans all stages of clinical trials.

ZS' more complex AI/GenAI in clinical trials technology implementation engagement involves helping a major pharma develop a next-generation GenAI platform, as a centralized capability hub for clinical trials. This platform will enable the digitization and standardization of clinical data and documents, will provide AI-powered knowledge assistants to provide comprehensive insights, and will use natural language–driven analytical tools for exploratory analysis and literature synthesis. It is also designed to support AI-driven clinical document authoring for regulatory and scientific reporting. ZS forecasts $25 million in savings through this initiative.

ZS' more complex AI/GenAI in clinical trials technology consulting engagement involved partnering with a major pharma to optimize its clinical trial design process, working closely with the clinical innovation lead for the past four years. The goal was to reduce patient and site burden by developing low-complexity trials while maintaining scientific integrity. Key objectives included identifying the right set of inclusion/exclusion criteria and endpoints through internal and external benchmarking, estimating study costs at the draft stage, minimizing health authority queries by leveraging historical data, and optimizing supply chain management by improving enrollment forecasting, patient attrition prediction, and drug supply planning across sites and countries.

"We already had built a GenAI-enabled model-agnostic platform for document generation, but the features were incomplete. ZS configured it for us for specific document types. They enabled us to deliver it across over 20 different document types. They contributed to the features and design and then became the implementation partner. We also asked for BAs with clinical document expertise to help understand the document needs. It wasn't perfect, but ZS adjusted the team and provided more oversight from more experienced members — that helped resolve the issues. ZS took

about 5 months to configure the platform for 20 document types. ZS' strength, in general, is that its leadership is very strong. They put their attention and focus on an initiative and they provide a lot of guidance to their team members to ensure that the solutions is being implemented with best practice. I have only good things to say about ZS' leadership. What made the collaboration really enjoyable was that they would dig into the data and analyze it really thoroughly and bring forth a proposal for a solution. It's the proactiveness and the problem-solving that I really appreciated. It's a very special team that I am currently working with. I would definitely highly recommend ZS," said the senior director, IT for Global Drug Development, of a major global biopharma.

"ZS has helped us with multiple GenAI initiatives, including clinical study design — cost optimization, cycle time optimization, and content generation (we saw 30% efficiency gains); and they developed a global development assistant for competitive intelligence — it's been productionized. It supports knowledge. discovery, search, and summarization. If you want a strategic partner, an innovator, and someone that can think OTB and you want sure shot success without going through an experimental cycle and technical debt, then ZS is your partner. You need mindshare. I validate my thinking with them often. They don't make assumptions. They don't tell you what you want to hear. Their strengths are innovation, entrepreneurship, bringing thought leadership into a discussion, accountability, and transparency. They are doing a great job with both strategy and execution, though strategy is definitely their strong point," said the director, AI-assisted clinical operations, R&D IT, of a major pharma.

Challenges

ZS should add regulatory submissions and automating patient payments to its portfolio of AI/GenAI use cases. It has the opportunity to expand its existing AI/GenAI consulting capabilities to include providing guidance on sustainability strategies when implementing AI/GenAI in clinical trials. Currently only a very small percentage of ZS life sciences customers leverage its AI/GenAI consulting capabilities. ZS should build its customer base for the medical device and CRO industry. For bigger initiatives, ZS needs to ensure that the right oversight is provided. While ZS teams in general have deep life sciences experience, performance depends on the assigned team. ZS pricing is on the higher side. ZS tends to say yes to everything, and teams need to call out issues when they see them.

Consider ZS Associates When

Consider ZS if you are seeking to partner with deep life sciences domain expertise, with a clear focus on enabling digital data flows, and a strong footprint in implementing AI/GenAI in clinical trials, in niche areas such as site selection, patient recruitment, and document authoring, consulting expertise in AI enterprisewide implementation

strategy, supported by ZS' own AI frameworks and reusable AI accelerators, an innovative, problem-solving mindset, and a core ecosystem of partnerships.

APPENDIX

Reading an IDC MarketScape Graph

For the purposes of this analysis, IDC divided potential key measures for success into two primary categories: capabilities and strategies.

Positioning on the y-axis reflects the vendor's current capabilities and menu of services and how well aligned the vendor is to customer needs. The capabilities category focuses on the capabilities of the company and product today, here and now. Under this category, IDC analysts will look at how well a vendor is building/delivering capabilities that enable it to execute its chosen strategy in the market.

Positioning on the x-axis, or strategies axis, indicates how well the vendor's future strategy aligns with what customers will require in three to five years. The strategies category focuses on high-level decisions and underlying assumptions about offerings, customer segments, and business and go-to-market plans for the next three to five years.

The size of the individual vendor markers in the IDC MarketScape represents the market share of each individual vendor within the specific market segment being assessed.

IDC MarketScape Methodology

IDC MarketScape criteria selection, weightings, and vendor scores represent well-researched IDC judgment about the market and specific vendors. IDC analysts tailor the range of standard characteristics by which vendors are measured through structured discussions, surveys, and interviews with market leaders, participants, and end users. Market weightings are based on user interviews, buyer surveys, and the input of IDC experts in each market. IDC analysts base individual vendor scores, and ultimately vendor positions on the IDC MarketScape, on detailed surveys and interviews with the vendors, publicly available information, and end-user experiences in an effort to provide an accurate and consistent assessment of each vendor's characteristics, behavior, and capability.

Market Definition

The life sciences industry is continuously being buffeted by the prevailing geopolitical scenario, the potential impact of tariffs, the "most favored nation" drug price executive

order driving the need for reshoring manufacturing to the United States, the layoffs in the FDA (potentially delaying regulatory approvals), and slowing down the pace of innovation. Chris Boerner, CEO, BMS, has noted that from 2010 to 2022, the U.S. share of global life sciences patents dropped from 50% to 37%, whereas for China it increased from 17% to 42%. As a result of the additional impact of the tariffs, David Ricks, CEO, Eli Lilly, has observed that, "Typically, that will be in reduction of staff or R&D, and I predict R&D will come first. That's a disappointing outcome."

The whole situation has created immense pressure on pharma to cut costs, scale efficiencies, and accelerate innovation. And the industry is turning toward AI to save the day. While spend is being controlled, the adoption of AI in the life sciences industry is scaling rapidly, and over 40% of the industry expects that the one area where investment will not be impacted, despite the prevailing geopolitical scenario, is AI and automation (source: IDC's *Future Enterprise Resiliency and Spending Survey, Wave 11,* November 2024).

There is a significant effort to centralize governance and 43% of the life sciences industry reported that their AI initiatives were managed centrally by the CIO's office or an AI center of excellence. AI transformation strategy is being led by the CIO/VP of IT across over half of the life sciences industry;18% reported that it was led by the Chief AI Officer/the VP of AI (source: IDC's *MaturityScape Benchmark AI Survey,* February 2025).

Every possible use case is being evaluated. Everything that can be automated is being automated and no avenue is being left unexplored. Enterprisewide scalability and embedded AI to minimize disruption of existing workflows are being prioritized. Building trust and driving transparency are top of mind in an industry that deals so closely with patients. There is a lot of focus on transforming both patient and provider experiences.

Agentic AI is gaining significant importance, and three-fourths of the life sciences and healthcare industry is prioritizing their agentic AI investments toward eliminating manual and semi-manual workflows (source: IDC's *Future Enterprise Resiliency and Spending Survey [FERS],* May 2025). Notably, the most sought-after information from IT leadership by senior leadership regarding AI agents was related to how organizations could scale business without adding head count while ensuring quality (44%) and how organizations could enhance customer experiences with personalized interactions (35%). Yet half of the industry remains concerned about the risk of potential unintended consequences, potential data breaches (37%), and security vulnerabilities (29%) (source: IDC's *Future Enterprise Resiliency and Spending Survey,* November 2024).

Closely following were concerns related to ethics and transparency. As Cathy O'Neil, the author of *Weapons of Math Destruction* aptly puts it, "AI is a black box that defies human understanding, making it difficult to trust and adopt." The lack of transparency and

concerns regarding bias creep raise concerns in the minds of patients, providers, and regulators, as well. The FDA's draft guidance on "Considerations for the use of AI to support regulatory decision-making for drug and biological products," as well as on "AI-enabled medical devices" emphasize the importance of source transparency and bias mitigation.

Addressing concerns regarding jobs being replaced by AI run high, and the latent inertia to changing the way of doing business is also a roadblock to scaling adoption. Hence robust change management strategies will be critical to driving adoption, and concrete frameworks to measure ROI will be fundamental to every AI implementation strategy.

There has been a tsunami when it comes to the adoption of AI/GenAI in clinical trials in the life sciences industry. While many use cases have been explored, prioritizing the critical ones, deploying at scale, and fueling adoption is where the rubber meets the road.

LEARN MORE

Related Research

- *Smart Agents, Smarter Science: The Future of the Life Sciences Industry* (forthcoming)
- *Rewriting the Script: How GenAI is Revolutionizing Medical Writing* (forthcoming)
- *IDC MaturityScape Benchmark: AI-Fueled Life Sciences Organization Worldwide, 2025*, (IDC #US53345625, May 2025)
- *Generative AI Use Case Taxonomy, 2025: The Life Sciences Industry* (IDC #US52220325, May 2025)
- *Worldwide GenAI Industry Use Case Early Adoption Trends, 2025: Life Sciences* (IDC #US53317424, April 2025)
- *Critical Guidance on the Impact of AI Adoption on Life Science Investment Strategy: Bio-IT 2025* (IDC #US53305125, April 2025)
- *NVIDIA GTC 2025: Where AI and Innovation Are Taking the Life Sciences Industry to New Heights* (IDC #lcUS53283125, March 2025)
- *How AI and GenAI Are Redefining the Life Sciences Industry* (IDC #US53163925, February 2025)

Synopsis

This IDC study focuses on a combination of AI (including GenAI) in clinical trials technology solutions and consulting services. This IDC MarketScape provides a qualitative and quantitative assessment based on criteria that should be important to

life sciences companies when considering the selection of a strategic technology partner to help provide solutions, implementation support, and strategy for the use of AI (including GenAI) in clinical trials. This is the first time that an IDC MarketScape assessment of AI (including GenAI) in clinical trials technology solutions and consulting services for life sciences R&D has been performed.

Dr. Nimita Limaye, research VP, Life Science R&D Strategy and Technology at IDC, noted, "The life sciences industry is experiencing a maelstrom of headwinds and tailwinds, and AI will help the industry navigate these turbulent waters. It's really 'the six Es of AI' that define the path ahead for AI adoption in the life sciences industry: the **e**nterprisewide adoption of AI, **e**mbedded AI, **e**dge AI, **e**xplainable AI, **e**thical AI, and **e**mpathetic AI. The industry is focusing on leveraging AI to drive business resiliency, fuel innovation, accelerate time-to-market, scale manufacturing, and optimize patient and provider experiences — indeed, AI is touching every nook and cranny of the life sciences industry. The life sciences industry will have to balance caution and careful execution against skepticism and overzealous enthusiasm."

ABOUT IDC

International Data Corporation (IDC) is the premier global provider of market intelligence, advisory services, and events for the information technology, telecommunications, and consumer technology markets. With more than 1,300 analysts worldwide, IDC offers global, regional, and local expertise on technology, IT benchmarking and sourcing, and industry opportunities and trends in over 110 countries. IDC's analysis and insight helps IT professionals, business executives, and the investment community to make fact-based technology decisions and to achieve their key business objectives. Founded in 1964, IDC is a wholly owned subsidiary of International Data Group (IDG, Inc.).

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