IDC MarketScape

# IDC MarketScape: Worldwide Life Sciences R&D Pharmacovigilance Technology Solutions and Consulting Services 2025 Vendor Assessment

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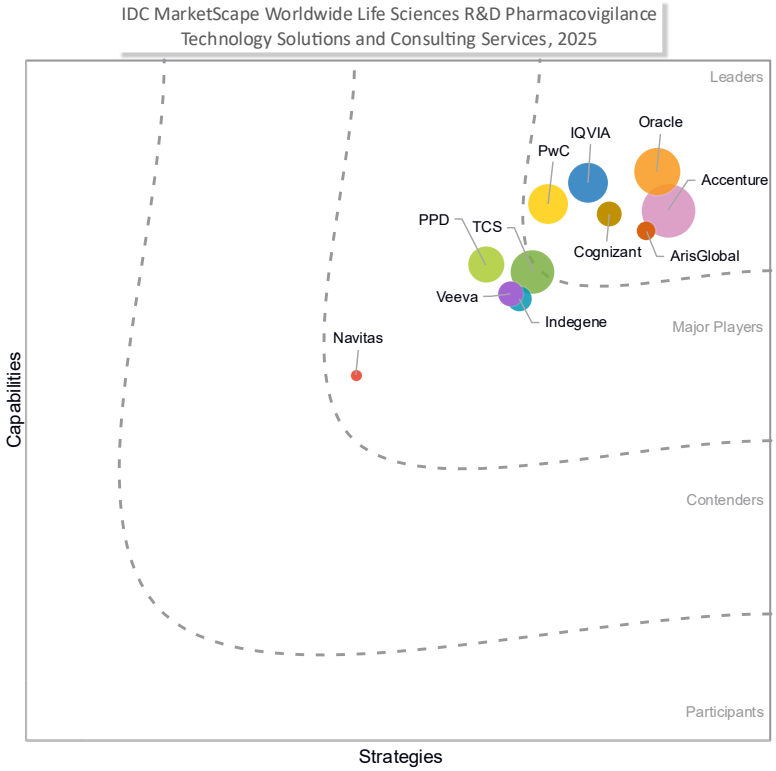
## THIS EXCERPT FEATURES PWC AS A LEADER

## IDC MARKETSCAPE FIGURE

### FIGURE 1

**IDC MarketScape Worldwide Life Sciences R&D Pharmacovigilance Technology Solutions and Consulting Services Vendor Assessment**




Source: IDC, 2025

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Please 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 Pharmacovigilance Technology Solutions and Consulting Services 2025 Vendor Assessment (Doc # US53669225).

## IDC OPINION

It is extremely concerning to note that the American Society of Pharmacovigilance (ASP) has reported that in 2025, adverse drug events now account for over 250,000 deaths annually and are the third leading cause of death in the United States, moving up from the fourth position in 2021. As Sara Rogers, ASP president rightly puts it, "We cannot afford to stand by while medication-related harm continues to grow. It's time for decisive action."

Even more concerning is the fact that up to 94% of adverse drug reactions (ADRs) are not reported by healthcare providers, delaying the detection of safety signals and negatively impacting clinical outcomes.

Yes indeed, lives are at stake, and this is the time for action, for both the pharma industry and the pharmacovigilance (PV) technology and consulting solution providers to join hands to address this challenge.

The industry is in the process of either building, acquiring, or composing intelligent drug safety platforms. Over half of the industry is following a compose strategy to build drug safety platforms, whereas one-fourth are purchasing these platforms and a fifth are building these internally. Almost half (45%) of the resources used to build and maintain drug safety platforms come from external resources (see *Worldwide GenAI Industry Use Case Early Adoption Trends, 2025: Life Sciences,* IDC #US53317424, April 2025).

Different artificial intelligence (AI)–enabled PV initiatives are being pursued by pharma companies. Eli Lilly has built MosaicPV, an intelligent case intake platform, while AstraZeneca, Pfizer, and Roche have used AI to mine social media to identify ADRs up to 50% faster than usual, and Sanofi's AI-enhanced signal detection is reported to have achieved an 85% sensitivity and 75% specificity in identifying previously unrecognized safety signals and a six-month reduction in the time for identifying previously unrecognized safety signals. Pharma is also using digital assistants to enhance access to medical information and streamline the initial intake phase of adverse event (AE)

case processing. Pfizer, for example, is using Medibot in the United States; Fabi in Brazil; and Maibo in Japan.

However, the life sciences industry as well as PV technology solution and consulting services providers are dealing with their own unique challenges.

## PV Life Sciences Industry Challenges

The real goal of the life sciences industry is to ensure a consistent positive benefit-risk profile for the drugs that it manufactures. However, this is not an easy task as organizations struggle with fragmented data sources, latency issues, and more.

PV database platforms that come with out-of-the-box features may need to be customized to align with the specific operational needs, unique drug profiles, or regional regulatory requirements of the life sciences industry. The customization, however, may result in the fragmentation of how PV activities are conducted across an organization.

Some of the key challenges that the life sciences industry faces are:

- Underreporting of adverse drug reactions, which decreases the chances of signal detection (It becomes more complicated when dealing with rare diseases, where the number of patients is significantly low, and patients are scattered far and wide, and the disease is, more often than not, diagnosed very late in the day.)
- Data overload and signal detection (Finding a needle in a haystack is never an easy task and there is a need for efficient tools to explore the vast amount of data that exists out there, and efficient tools are required to filter through the false positives and negatives, and the confounding factors [such as patient demographics or concomitant medications]. This can make understanding signal scores challenging.)
- Evolving global PV and technology regulations, which make global harmonization challenging
- Challenges in post-marketing surveillance, including challenges in gathering real-world data owing to patient noncompliance and insufficient data sources
- Data integration challenges and the lack of standardized reporting systems (There is immense diversity in the data sources, including structured/unstructured, formats of data, fluctuation in the volumes of incoming data, as well as variations in reporting standards across geos.)
- Counterfeit and substandard medicines that pose significant risks to patient safety
- Patient engagement and awareness, underlining the need for patient education and user-friendly reporting platforms

- The need to handle increasing annual caseloads and simultaneously reducing process costs while using legacy systems
- Limited number of resources with deep safety domain expertise
- Lack of maturity in AI adoption, change management issues, and concerns regarding compliance
- The added complexity of managing the increasing number of adverse events resulting from the growth of combination products and advanced therapy medicinal products (ATMPs), where the industry still lacks deep expertise

## PV Vendor Challenges

- Navigating the fine balance between scaling efficiencies while ensuring compliance and minimizing risk
- Dealing with rising cost pressures across the value chain and a limited ability to invest from the industry, resulting in cuts in PV budgets
- The growing competition on pharma from generic manufacturers and biosimilars that intensifies the need for pharma to differentiate (This is pushing PV providers to innovate while managing tight margins.)
- A lack of willingness to see PV as a value driver rather than a cost center, resulting in the desire from the industry to prioritize incremental process improvements or cost cutting over larger, transformational initiatives
- Long duration PV contracts, significant transition costs, an aversion to transition to new vendors, and long decision cycles (more so in medium-sized enterprises) making it hard for incumbents
- Expanding portfolios and shifting investment priorities are demanding PV expertise in new therapeutic areas
- Hiring skilled PV resources with rich therapeutic area expertise and tech expertise continues to be a challenge
- While technology is transforming the PV landscape, at the end of the day, business processes also need to evolve in parallel to drive ROI (A lack of trust in AI, a lack of willingness to adapt business processes, and concerns regarding brand and regulatory risks often kill the potential gains in cost and process efficiencies.)

In the turbulent world of today that seems to be undergoing ongoing seismic shifts, it is the cutting-edge technologies that will serve as game changers, only if they are complemented by deep strategic PV expertise. Bottom line, for the life sciences industry, it is about patient safety and compliance.

## IDC MARKETSCAPE VENDOR INCLUSION CRITERIA

IDC frequently has unique visibility into vendor selection processes within life science 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 sciences space, based on an assessment of the vendor's capability in providing technology solutions and consulting services to support the implementation of a pharmacovigilance strategy.

The key inclusion criteria included:

- Vendors should have at least five customers for their PV offering for a duration of at least 12 months as of December 31, 2024.
- Vendors should provide technology solutions/platforms to support PV.
- Vendors should have guided customers on establishing audits, inspections, system gap assessment, SOPs, templates, workflows, the design of risk management activities, change management, benefit-risk assessment strategy, or other consulting activities for the implementation of PV.
- Vendors should have a minimum company revenue of $200 million.

The 11 life sciences R&D pharmacovigilance solution providers selected to participate in this study are:

- Accenture
- ArisGlobal
- Cognizant
- Indegene
- IQVIA
- Navitas (Navitas Life Sciences)
- Oracle
- PPD (Thermo Fisher Scientific)
- PwC
- TCS
- Veeva

## ADVICE FOR TECHNOLOGY BUYERS

Just when the life sciences industry thought that the disruption caused by the COVID-19 pandemic was over and that the dust had settled, it has been once again rocked by evolving policies and regulations, tariffs, price control executive orders, geopolitical turbulence, the fear of a recession, and more.

The life sciences industry is absolutely seeing the need to invest in technology solutions and partnering with strategic PV technology solution providers but is waiting and watching cautiously for signs of stability. It recognizes that technology will save the day but is holding back its purse strings, waiting for the right moment.

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

- Deep, proven PV-specific expertise, complemented by global regulatory expertise across PV and tech
- Expertise in embedding GenAI solutions and AI agents to scale efficiencies, complemented by an understanding of the regulatory landscape
- Scalable, modular, plug-and-play models that work for emerging biopharma
- Platforms with ongoing, seamless upgrades to ensure global regulatory compliance, while not disrupting operations
- Expertise in the enterprisewide implementation of PV solutions
- Consulting expertise in transforming PV business operations to integrate changes driven by new technology, while ensuring compliance
- The use of cloud-based technology platforms that accelerate the transition toward zero-touch case processing
- Unified platforms creating a single source of truth, error proofing the data and minimizing redundancies
- Ensuring the use of ethical and explainable AI solutions
- Implementing the right data governance models and data placement strategies
- Predictive analytics to support signal detection and management
- Guidance on selecting the right PV technology vendor, and providing the right vendor oversight model
- Expertise in setting up global capability centers (GCCs) for PV
- Compatible corporate cultures
- The ability to demonstrate accountability through outcome-based/risk-sharing pricing models

- Pay-for-use pricing models that offer flexibility to CROs, based on fluctuating business demands
- 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.

### PwC

After a close evaluation of PwC's offerings and capabilities, IDC has positioned the company in the Leaders category in the 2025 IDC MarketScape for worldwide life sciences R&D pharmacovigilance technology solutions and consulting services.

Founded in 1849, PwC is a digitally enabled consultancy with over 320,000 employees, 16,000 of which support health industries. Three-fourth come from the industry and have 8–10 years of life sciences industry experience. PwC has dual headquarters in New York and London and is privately held. It has 100–200 PV resources supporting PV technology and consulting with an average of 14 years of experience. It has been providing PV tech solutions for the past decade and PV consulting services for over 13 years. It sees its PV tech and consulting services growing by 40% in 5 years. PwC's services impact the portfolio of many of the top pharma, and its projects have impacted over 500 studies. It has 11 PV customers, three-fourth of which represent pharma. Of its PV customers, 70% of are from the United States, 20% are from Europe, and the rest are from APAC. More than half (60%) have revenues over $1 billion. Half of its PV customers use its technology solutions, and half use its consulting services. PV represents 15% of its revenue and PwC expects its PV revenue to grow by 20 in three years. PwC continually invests in PV R&D and expects this investment to grow by 15–20% annually over the next three to five years.

In addition:

- **Strategic initiatives:** PwC envisions PV as an organizational value driver, which can tap into huge safety data sets leveraging PV-specific advanced analytics, predictive modeling, and AI applications, to better understand and predict patient toxicity and better inform upstream target selection and validation processes.

Its vision is to focus more on scaling innovation, on being more proactive rather than reactive, on driving more automation at the point of entry, and on integrating PV across the pharma and life sciences value chain.

PwC is implementing a solution that uses GenAI to detect adverse events in free text. It is also developing a PV operational support services offering.

- **M&As/partnerships:** PwC entered an ongoing collaboration agreement with a leading PV software vendor, a provider of an intelligent automation-enabled PV platform in 2019. PwC is a member of the Drug Information Association, the European Federation of Pharmaceutical Industries and Associations, the European Network of Centres for Pharmacoepidemiology and Pharmacovigilance (ENCePP), the Validation and Regulatory Compliance Professionals Group, the Life Sciences Industry Quality and Compliance Network, and the Pharmaceutical Information and PV Association.
- **Pricing models:** Fixed price is most commonly used, though it sees it evolving toward value/outcome-based pricing.

## Strengths

PwC's differentiators include its proprietary, first cloud-native PV platform (hosted on AWS) launched in 2018, which uses AI/ML to automate case processing, and that has passed multiple regulatory inspections, its experience in business strategy and technology implementation across the PV value chain, powering its comprehensive PV consulting services. PwC reports that its platform has been able to drive 75% reduction in end-to-end cycle time, and a 35% reduction in overall touch-time per case. PwC has also enabled case processing on its platform for the Japanese market.

PwC's PV platform has four layers:

- The ingestion layer ingests data from disparate data sources, using AI and RPA.
- The data transformation layer uses a relational database to support operational reports. Here source data is refined and standardized in preparation for the inference layer.
- In the inference layer, AI/ML models extract case data from transformed source data.
- The data store layer is where adverse events created from source data are stored and E2B messages are created.

Three layers (apart from the data layer) have been developed using serverless technologies, creating an efficient architecture to minimize costs. The system has full traceability through the platform and it has been fully audited by the FDA. The platform currently has case intake and case processing capabilities and uses deterministic AI models to automate case intake and processing, including determination of case and

event seriousness, the extraction of drugs and events, determination of the case validity, and the coding of adverse events. The PwC platform uses GenAI to generate spontaneous case narratives.

PwC reports that the use of its platform has resulted in a 60% reduction in case touch times and an 80% reduction in case processing times, as well as 60% optimization of internal and vendor resources. Labeling automation is part of a separate PwC automation solution. The platform passed FDA and MHRA inspections, demonstrating 100% compliance, and less than 10% of cases required information to be updated.

In one of PwC's most complex PV technology engagements, PwC implemented its platform and integrated it with its client's Salesforce call center system and safety database. PwC also provided adoption support. 500,000 HCP interactions were analyzed to identify adverse events, product quality complaints, and medical information queries. PwC reports that it achieved 100% monitoring of all records using AI and a 30% reduction in review time per record.

PwC provides PV consulting services to customers ranging from small biotechs to the top 10 pharma. PwC has a dedicated workforce transformation team with experience in PV organizational design, business process transformation, and business enablement. It has a dedicated technology and transformation team. It has helped a client that was launching its first commercial product better understand the gaps in its PV systems. PwC has a dedicated risk and regulatory team, which includes ex-FDA and ex-EMA regulatory experts, with experience in designing risk management activities, including RMPs and REMS, benefit-risk assessments, and in preparing for inspections. It also provides a series of multivigilance services.

Its most complex PV consulting engagement involved helping a top 10 global pharma client transform its PV business and technology by helping it develop a five-year transformational strategy, including defining, prioritizing, and executing initiatives; optimizing the operating model and organization design; designing, developing, and implementing a PV platform; delivering improvements in clinical trial safety rates; and delivering upskilling and change management to facilitate adoption of the changes.

PwC focuses on going beyond scaling efficiencies to integrate PV into workflows, garnering critical data across the R&D value chain, generating key insights into the safety profile of the molecule, predicting patient toxicity, informing upstream target selection and validation, and working toward building a next-gen in-silico safety framework.

"PwC used an agile implementation model to implement a case intake solution for us in 2024; it went live in 8 months. While it started with 1 patient support program (PSP), 1 product, and 1 country, today it is being used across three countries (United States,

Canada, and Japan) and the case volumes processed on this platform have increased from 250,000 to 400,000. These include mainly spontaneous reporting cases, and cases from some PSPs. We have seen 30% efficiency gains using this tool. We jointly developed four different ML models. We chose PwC because we were looking for something more visionary than just a project upgrade. PwC's pharma knowledge was very good; PV wasn't super high.

I think they did a fantastic job, I have worked with many, many vendors. In this project we were truly a team. When we built this, AI was really new, and they helped us stretch and think about the best solutions. I believe what we built is really good, even several years later. PwC is now helping us with business process mapping, and now with training, SOPs, and OCM. Their consulting services are incredibly good, and they have delivered very well. We used another vendor earlier — and they didn't match PwC at all. The level of the people that they brought to the team was absolutely top notch," said the executive director, Emerging Technology and Systems, Global Patient Safety of a large, global pharma.

### Challenges

PwC's pricing is perceived to be fairly high. PwC's platform currently lacks electronic submission and e-labeling capabilities; a central staging area for evaluating submitted affiliate cases; the ability to configure workflows, reviews, and reporting procedures; and the ability to enable configuration to meet regional regulatory requirements. PwC currently has only one customer on its PV platform and still needs to build its brand and customer base for its PV platform. The platform currently does not support literature search, aggregate report generation, signal detection, e-labeling, and social media mining capabilities. It currently provides guidance only on medical device/materiovigilance and should develop other multivigilance capabilities.

### Consider PwC When

Consider PwC when seeking deep experience in business strategy and technology implementation across all aspects of PV, as well as a cloud-based AI/ML-enabled platform that automates case intake and processing, that leverages GenAI for narrative generation, and that has passed FDA and MHRA inspections,

## 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 years002E

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

For the purposes of this study, IDC follows the FDA definition of PV, namely, "PV is the science and activities relating to the detection, assessment, understanding, and prevention of adverse effects or any other drug-related problems."

PV solutions within this IDC MarketScape are defined broadly as:

- The solution includes PV-specific technology solutions and consulting capabilities.
- The PV solution will encompass the capability of the technology solutions provided and will consider how vendors advise their customers on implementing a PV strategy.

- From a technology perspective, the PV solution would include the provision of a PV platform, and/or related automation solutions, and the use of RPA, AI/ML, NLP, NLG, OCR, computer vision, and so forth to automate case intake, case processing, signal management, narrative writing, aggregate reporting, and so forth, as well as PV technology implementation, data migrations and integration, and so forth.
- From a consulting perspective, the PV solution will encompass high-level management consulting and advisory services, including business value case development, business process transformation, PV vendor selection and oversight strategy, development of SOPs, PV organizational redesign and change management, global PV implementation strategy, PV regulatory strategy, inputs into the development of risk management plans, and PVAs.

## Market Analysis

Slowly, but surely, the PV landscape is changing. There is a shift from treating PV as a cost center to considering it to be a value driver, to proactivity instead of reactivity, from manual activities and RPA to more of GenAI and agents, from focusing only on clinical trial data to increasingly evaluating both clinical trial and real-world data (RWD), and from reactive responses (responding to adverse events that have already happened) to proactive measures, identifying signals, to determine potential risk in advance and preempt undesired outcomes, and leveraging AI and analytics to inform upstream target selection and validation processes.

Sedgwick, a product recall provider, has reported that class I pharmaceutical product recalls (the most serious category) increased to 14 in 1Q25 from six in 4Q24. There needs to be an increased emphasis on ensuring drug safety and on getting it right the first time. The need to embed a precision PV strategy across the life cycle of a medicinal product, to embed a safety-by-design strategy into product development, is becoming the reality of today.

The prevailing geopolitical scenario, the potential impact of tariffs, the "most favored nation" drug price executive order, and more, have all put immense pressure on pharma to cut costs and scale efficiencies. "Automation everywhere" is becoming a reality for pharmacovigilance. From automated case intake, case triaging, and case processing to translations, causality assessments, to PV report generation and signal detection, AI is everywhere.

To date, too many people have suffered as a result of the side effects of drugs. Drugs are meant to help us, not harm us, and the life sciences industry is hell bent on setting this right. Technology is offering immense promise in driving precision PV strategies, generating real-time insights to detect safety signals, prevent serious adverse events, and improve clinical outcomes and in enabling the industry to embed safety-by-design

strategies through effective feedback loops providing critical data insights into the design of experiments (DoE) to design drugs with improved benefit-risk profiles.

## LEARN MORE

## Related Research

- *The Technology Impact of the New Trump Administration, 2025: Life Sciences, Medtech Companies, Healthcare Providers, and Healthcare Payers* (IDC #US53552525, June 2025)
- *IDC MaturityScape Benchmark: AI-Fueled Life Sciences Organization Worldwide, 2025* (IDC #US53345625, May 2025)
- *Worldwide GenAI Industry Use Case Early Adoption Trends, 2025: Life Sciences* (IDC #US53317424, April 2025)
- *How AI and GenAI Are Redefining the Life Sciences Industry* (IDC #US53163925, February 2025)
- *IDC MarketScape: Worldwide Life Science R&D Pharmacovigilance Solutions 2022 Vendor Assessment* (IDC #US48061622, December 2022)

## Synopsis

This IDC study focuses on a combination of PV 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 PV solution provider to help provide guidance for strategic, operational, and tactical transformation issues within the PV space, as well as technology platforms and build capabilities. This is the third time that an IDC MarketScape assessment of PV solutions for life sciences R&D has been performed.

Dr. Nimita Limaye, research VP, Life Sciences R&D Strategy and Technology at IDC, noted, "Slowly but surely, the transition is happening. Pharmacovigilance is gradually beginning to be seen as a value driver rather than a cost center, with tech as the game changer, fueling precision PV strategies. From automated case intake to rapid signal detection, automation and AI are being embedded across the PV value chain. Ensuring transparency will be key toward building trust, scaling adoption, and driving patient safety."

## 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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