

## Best Practices Criteria for World-Class Performance

Frost & Sullivan applies a rigorous analytical process to evaluate multiple nominees for each Award category before determining the final Award recipient. The process involves a detailed evaluation of best practices criteria across two dimensions for each nominated company. ArisGlobal excels in many of the criteria in the clinical development and pharmacovigilance software space.

AWARD CRITERIA	
<i>Business Impact</i>	<i>Customer Impact</i>
Financial Performance	Price/Performance Value
Customer Acquisition	Customer Purchase Experience
Operational Efficiency	Customer Ownership Experience
Growth Potential	Customer Service Experience
Human Capital	Brand Equity

### *The Evolving Significance of Pharmacovigilance*

In 2018, Frost & Sullivan predicted the pharmaceutical (pharma) industry to grow at a moderate 4% to 5% and exceed \$1.5 trillion by 2025 - with drug discovery and development comprising 8% to 10% of the revenues.<sup>1</sup> However, the COVID-19 pandemic created an unexpected and urgent demand for speedier and higher clinical research volumes, causing the pharmacovigilance (PV) industry to gain traction quite rapidly.

Also known as drug safety, PV is a scientific-driven process that studies drug side effects, conducts risk-benefit analysis, and monitors and prevents adverse drug reactions (ADRs) for safer drug consumption. A study reports around 4.1% of non-elderly and 16.6% of elderly patient hospitalizations due to ADR, with a massive 88% of the elderly hospitalizations deemed preventable,<sup>2</sup> thus highlighting the exigency for PV. Moreover, with ADRs as the fourth to the sixth leading cause of death in hospitals in the United States (US), drug-related mortality and morbidity costs estimates are at \$30 billion conservatively, and \$130 billion in the worst-case scenario.<sup>3</sup>

<sup>1</sup> *Global Contract Research Organization (CRO) Market, Forecast to 2024*, (Frost & Sullivan, November 2019)

<sup>2</sup> Beijer, H. J. M., & de Blaey, C. J. (2002). *Pharmacy World and Science*, 24(2), 46–54. <https://doi.org/10.1023/a:1015570104121>

<sup>3</sup> White, T. J., Arakelian, A., & Rho, J. P. (2012). Counting the Costs of Drug-Related Adverse Events. *PharmacoEconomics*, 15(5), 445–458. <https://doi.org/10.2165/00019053-199915050-00003>

Frost & Sullivan notes that the sudden demand surge for drug discovery and development places acute pressure on the global PV market to produce high-quality results in a shorter time while dealing with staggering additional data volumes. However, life sciences organizations continue to use manual processes and outdated legacy technology systems that considerably lower productivity and accuracy.

In light of the current scenario, Frost & Sullivan recognizes ArisGlobal as an innovative life sciences software solutions provider. The company enables life sciences organizations to deliver breakthroughs seamlessly and quickly. Founded in 1987 and headquartered in Miami, Florida, ArisGlobal provides technology solutions to 9 government health authorities, 4 of the top 5 global pharma companies, and 40 of the top 50 biopharmaceutical companies worldwide. Acquired by Nordic Capital in 2019, the company has regional offices in the US, Hungary, Germany, India, China, and Tokyo and offers products with 100% compliance to global regulatory standards.

### *Customer-centric Product Design Enhances Customer Experience*

ArisGlobal's proprietary platform, LifeSphere®, is a suite of unified cloud applications spanning clinical, regulatory affairs, safety, and medical affairs. LifeSphere® is a data-first platform that centralizes content and data for unified reporting and reference data management. Centralization ensures that a data concept (whether a product, authorization, study, International Centre for the Study of Radicalization) is defined, maintained, and referenced at the "golden source" to help research and development (R&D) teams save time, ensure data integrity, and accelerate collaboration. The platform also embeds production-ready intelligent automation to accelerate the flow of data and documents across life sciences organizations and improve efficiency.

Frost & Sullivan appreciates how LifeSphere® benefits its clients by accelerating R&D significantly, maintaining compliance, and streamlining collaborations between cross-functional teams.

### *LifeSphere® Safety*

ArisGlobal's automated PV cloud platform is future-proof, not only technologically but also in adaptability to evolving regulatory requirements. Capable of producing a real-time benefit-risk assessment, the platform is scalable according to need and driven by artificial intelligence (AI)-enabled end-to-end decision-making capabilities.

Within its safety product line, the company offers modules across the process spectrum to unlock insights:

- Data collection: LifeSphere® Intake and Triage, LifeSphere® LitPro, and LifeSphere® Reporter
- Data processing: LifeSphere® MultiVigilance
- Actionable Insights: LifeSphere® Reporting and Analytics and LifeSphere® Signal and Risk Management.

ArisGlobal is the first company in the industry to go live with an automated end-to-end safety platform. LifeSphere® MultiVigilance is entirely browser-based software with multiple language support that simplifies the client's user experience. It is at least 35% more efficient than the company's traditional legacy systems. Powered by the Amazon Web Services (AWS) Cloud, more than 85 of ArisGlobal's over

*“ArisGlobal’s automated PV cloud platform is future-proof, not only technologically but also in adaptability to evolving regulatory requirements. Capable of producing a real-time benefit-risk assessment, the platform is scalable according to need and driven by artificial intelligence (AI)-enabled end-to-end decision-making capabilities.”*

**- Ojaswi Rana, Best Practices Research Analyst**

200 customers migrated to its LifeSphere® platform to date.<sup>4</sup> The cloud-based platform reduces operating costs, allows quick on-boarding and deployment, and enhances security. LifeSphere® MultiVigilance uses the latest cognitive computing technologies, such as natural language processing (NLP) and machine learning (ML), facilitating intelligent automation, including language translation and case data extraction from unstructured data sources.

ArisGlobal’s sophisticated automation and AI technology eliminate repetitive tasks, leaving life sciences companies with more resources to focus on

strategic actions (such as risk and benefit assessments). As a result, study efficiencies rapidly increase - while drug safety evaluations improve significantly.

LifeSphere® Signal & Risk Management continuously identifies and assesses adverse event product impact by building a complete risk-benefit profile throughout its life cycle. The system analyzes the captured data to identify signals, manages the workflow using cognitive computing, and records all the decisions. LifeSphere® LitPro uses NLP and AI to identify and classify adverse events and medical literature signals. The technology also scours third-party databases to retrieve relevant articles for clients.

The LifeSphere® Safety platform’s open architecture reflects ArisGlobal’s commitment to integrating with their customers wider Information Technology ecosystems within and outside of the safety domain, enabled via application processing interfaces. In terms of global alignment, the platform enables employees worldwide to work under the same standard operating procedure, with workflows built according to zonal categorization. LifeSphere® Signal and Risk Management extends the platform beyond PV, incorporating additional features for ArisGlobal and its clients. The application provides advanced visualization and analytics to identify and track the developing clusters of potential patients.

Moreover, by leveraging ML and eliminating almost all of the manual effort required for traditional data entry, LifeSphere® Intake and Triage reduces data handling costs while improving overall quality. The application is purpose-built for companies that are looking to deploy automation on top of legacy safety databases. Furthermore, ArisGlobal’s cognitive automation helps replace human judgment efficiently to speed up and multiply intake, evaluate triage effectively, and monitor adverse events better. Frost & Sullivan analysts recognize how LifeSphere® Safety plays an integral role in enabling companies to bring safer products to market in a notably shorter time.

---

<sup>4</sup> ArisGlobal (2019, April 12). *ArisGlobal is Going "all-in" on Amazon AWS*. ArisGlobal. <https://www.arisglobal.com/blogs/arisglobal-going-all-in-on-amazon-aws-here-is-what-it-means-to-our-customers/>.

### *LifeSphere® Clinical*

On the clinical side, ArisGlobal leverages LifeSphere® CTMS, LifeSphere® eTMF, LifeSphere® EDC, and LifeSphere® eCOA to expedite studies. The cohesive products accelerate clinical trials by streamlining workflows and processes, unifying data management and clinical operations, and delivering vital analytics and insights to clients through intuitive graphical charts in story-form.

On-demand access to all trial-related documents through LifeSphere® eTMF allows health authorities to inspect, check regulatory compliance, and reconstruct trials from study start to closeout. Clients can further single out time-intensive workflows and mark them for further automation. The company is actively working on adding an ML component so that clients can support not only industry-standard forms, but also company-specific document formats. ArisGlobal expects to introduce this feature in 2022, allowing customers to auto file an impressive 97% to 99% of their eTMF content. Therefore, by eliminating a major point of friction to a real-time eTMF and improving their quality along the way, the company caters to small- to mid-sized customers who do not have automation teams in-house. Frost & Sullivan commends ArisGlobal's efforts to democratize access to automation technologies by making them available within its platform.

Furthermore, LifeSphere® CTMS's trip report offering shortens approval cycles for launching particular study phases. For example, before using LifeSphere® CTMS, a customer had a 19-day approval cycle and aimed to reduce it to less than 15 days. After using ArisGlobal's system, the customer's approval process came down to only 9 days, improving substantially. On the other hand, CTMS's investigator portal allows real-time access to the study by tracking documents and data while submitted from the site.

With an early mover's advantage in these products, the company identifies opportunities worth millions of dollars in integrating the LifeSphere® triad, i.e., eTMF, CTMS, and EDC. Meanwhile, the LifeSphere® eTMF employs improved structured content authoring tools. While already as immaculate and light as popular word editors, ArisGlobal's eTMF is sure to lead towards the next-generation content authoring tools and, eventually, on to content unification when coupled with its automation technology.

Finally, to elevate its customer purchase experience, the company simplifies its work documentation. It also delivers off-the-shelf products to shorten customers' time to go live, increasing their return on investment. While other competitors break their CTMS offerings into different licenses, ArisGlobal offers a simple pricing structure, fully covering the customer's study needs with one CTMS licensing agreement. Frost & Sullivan applauds the company for consistently applying simplification to its products and customer engagement strategies.

### *Innovating in Pharmacovigilance and Focusing on Clinical Development for Sustainable Growth*

The LifeSphere® platform's turn-key nature attracts a large global customer base with varying requirements. These requirements necessitate efficient interactions, which further require a customer-centric approach. Hence, the My ArisGlobal Support (MAGS) portal, alongside highly dedicated and skilled expert and analyst teams, ensures the highest quality customer-centric support. MAGS employs a global user community that focuses on resolving questions and issues rapidly. ArisGlobal invests in hiring subject matter experts across the industry so well-rounded, knowledgeable employees can support industry best practices and provide clients more than just software-as-a-service technology. More importantly, the company provides extra value to its customers by developing its solution as click-to-configure offerings.

ArisGlobal currently focuses on 4 product areas: clinical, safety, medical -affairs, and regulatory affairs. The company aims to move 75 of its customers live on its automation-enabled safety technology from 2021 to 2022. The customer base includes 10 of the top 13 life science companies and 9 global health authorities such as the US Food and Drug Administration and Health Canada, a testament to its superior product quality. The company has recently inched ahead of its top competitor in the safety market by winning accounts with giants like Johnson & Johnson and Bristol Myers Squibb. In addition, customers including Biogen, Merck, and Abbott have continued their business with ArisGlobal while choosing to move over to its cloud platform.

Besides its North America-based customers, several of the top 50 pharma and biotech companies apply

*“Nordic Capital, its owner, has invested heavily in the company to fuel growth in the clinical and regulatory segments from both the product and commercial perspectives. According to its five-year model, ArisGlobal targets to more than double its revenue by 2025. Frost & Sullivan finds this roadmap very promising.”*

*- Ojaswi Rana, Best Practices Research Analyst*

ArisGlobal's cloud solutions, including major international players like Japan's Takeda Pharmaceuticals and Asahi Kasei and British pharma giant AstraZeneca, illustrating its global reach. The US and Europe comprise most of the revenues. However, the company is also entering emerging markets such as China and India. It has close to 30 customers in China, including Fosun Pharma, and, in May 2020, India's largest pharma incorporated the LifeSphere® eTMF system, in addition to already leveraging LifeSphere® MultiVigilance and LifeSphere® Signal and Risk Management.<sup>5</sup>

In the medical affairs sector, ArisGlobal identifies medical devices as a growth area. It attracts interest from global pharmaceutical companies and large medical device companies. The company pinpointed changes in regulations and an increasing desire for automation as business opportunities.

The company is currently developing device-specific functionalities and product-compliant modules to cash in on this opportunity and extend its integrated solution across domains. Indeed, as with its safety

---

<sup>5</sup> India's Largest Biopharmaceutical Selects LifeSphere® eTMF to Streamline Clinical Trial Document Management. (2020, May 13). Cision PR Newswire. <https://www.prnewswire.com/in/news-releases/india-s-largest-biopharmaceutical-selects-lifesphere-r-etmf-to-streamline-clinical-trial-document-management-839161186.html>.

solution, ArisGlobal seeks to create a comprehensive one-stop-shop offering for clients' medical affair requirements.

Frost & Sullivan notes that the company's partnering strategies properly strengthen the industry ecosystem; for instance, its collaboration with other contract research organizations such as Pharmaceutical Product Development (PPD) and life science commercialization experts including Eversana. ArisGlobal also works with system integrators to acquire large-size customers. In 2020, the company's net dollar retention rate stood close to a remarkable 120%, expanding its install base for revenue and bookings quite significantly.

While PV is a key strategic area for ArisGlobal where it continues to innovate, the company is also focusing more on the clinical side. Nordic Capital, its owner, has invested heavily in the company to fuel growth in the clinical and regulatory segments from both the product and commercial perspectives. According to its five-year model, ArisGlobal targets to more than double its revenue by 2025. Frost & Sullivan finds this roadmap very promising.

## Conclusion

---

The global pandemic has surged the high demand for pharmacovigilance and clinical development worldwide, compelling pharmaceutical companies to process larger data volumes in a shorter time while producing high-quality results.

To address this critical need, ArisGlobal, a leading global provider of software-as-a-service solutions, has revolutionized the pharmaceutical space by transforming the way life sciences companies manage clinical development and drug safety. The company's innovative software platform and services clearly reflect customer prioritization. An industry-first, the LifeSphere® platform is the only unified platform in the market, ensuring superior customer ownership, purchase, and service experience. ArisGlobal's value offerings exceed what clients invest in them, which increases the company's diverse customer base. The company's unique growth strategy, involving partnering with other companies in the space, demonstrates its growth potential for the future and paves the way to strengthen the entire industry ecosystem.

For providing excellent customer experience and value with its innovative LifeSphere® platform, ArisGlobal earns the 2021 Frost & Sullivan Customer Value Leadership Award.

## What You Need to Know about the Customer Value Leadership Recognition

---

Frost & Sullivan's Customer Value Leadership Award recognizes the company that offers products or services customers find superior for the overall price, performance, and quality.

### Best Practices Award Analysis

For the Customer Value Leadership Award, Frost & Sullivan analysts independently evaluated the criteria listed below.

#### *Business Impact*

**Financial Performance:** Strong overall financial performance is achieved in terms of revenues, revenue growth, operating margin, and other key financial metrics

**Customer Acquisition:** Customer-facing processes support efficient and consistent new customer acquisition while enhancing customer retention

**Operational Efficiency:** Company staff performs assigned tasks productively, quickly, and to a high-quality standard

**Growth Potential:** Growth is fostered by a strong customer focus that strengthens the brand and reinforces customer loyalty

**Human Capital:** Commitment to quality and to customers characterize the company culture, which in turn enhances employee morale

#### *Customer Impact*

**Price/Performance Value:** Products or services provide the best value for the price compared to similar market offerings

**Customer Purchase Experience:** Quality of the purchase experience assures customers that they are buying the optimal solution for addressing their unique needs and constraints

**Customer Ownership Experience:** Customers proudly own the company's product or service and have a positive experience throughout the life of the product or service

**Customer Service Experience:** Customer service is accessible, fast, stress-free, and high quality

**Brand Equity:** Customers perceive the brand positively and exhibit high brand loyalty