FROST & SULLIVAN

2024 COMPANY OF THE YEAR

IN THE GLOBAL
CRDMO INDUSTRY

FROST & SULLIVAN

2024

PRACTICES



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. WuXi AppTec excels in many of the criteria in the CRDMO space.

AWARD CRITERIA	
Visionary Innovation & Performance	Customer Impact
Addressing Unmet Needs	Price/Performance Value
Visionary Scenarios Through Mega Trends	Customer Purchase Experience
Implementation of Best Practices	Customer Ownership Experience
Leadership Focus	Customer Service Experience
Financial Performance	Brand Equity

CRDMOs: Powering Pharma's Growth Amid Rising R&D Investments and Market Challenges

The global contract research, development, and manufacturing organization (CRDMO) market is a key growth driver within the pharmaceutical (pharma) industry. Initially, contract research organizations focused solely on research services. However, in the second decade of the 21st century, these organizations began expanding into development services, evolving into contract development and manufacturing organizations (CDMO).¹ Since 2020, CDMOs have evolved into CRDMOs, offering end-to-end services that span from research and development (R&D) to manufacturing.² This transition reflects the growing demand for comprehensive solutions within the pharma industry.

The CRDMO market is poised for significant growth, fueled by the increasing R&D expenditures in the global pharma market. Frost & Sullivan expects pharma R&D spending to grow at a compound annual growth rate of 7% from 2016 to 2030. This substantial investment increase can create lucrative opportunities for CRDMOs as pharma companies seek partners that offer integrated services to accelerate the development and delivery of innovative therapies.

¹ Global Drug Discovery and Early Development Outsourcing Growth Opportunities, (Frost & Sullivan, August 2021).

² Ibid

³ Global Pharmaceutical Healthcare Ecosystem Market Study, (Frost & Sullivan, July 2021).

Competition in the global drug R&D services market intensifies, driving CRDMOs to continually enhance their capabilities and capacities. This competitive pressure emphasizes the importance of delivering high-quality, efficient services that meet evolving customer needs. In addition, CRDMOs must navigate a complex regulatory environment, as their operations are subject to drug administrations and industry-specific regulations across various countries and regions. Adapting to regulatory changes is crucial to maintaining compliance and ensuring smooth operations.

Beyond competition and regulation, talent recruitment and retention are critical challenges for the CRDMO industry. Skilled professionals with expertise in pharma R&D and manufacturing are vital to delivering the specialized services that clients demand. Consequently, CRDMOs must invest in attracting and retaining top talent to maintain their competitive edge.

Lastly, macroeconomic factors and the capital market environment, such as rising interest rates and increasing borrowing costs, can impact investment in the pharma sector. CRDMOs closely monitor these factors and adjust their strategies accordingly to sustain growth in a dynamic market environment.

Leading Drug Development with Integrated Solutions and Cutting-edge Technologies

WuXi PharmaTech began operations in 2000, acquiring AppTec Laboratory (lab) services and forming WuXi AppTec in 2008. Starting from a single 7,000 square-foot lab, the company now offers integrated end-to-end R&D and manufacturing services. Since 2020, Frost & Sullivan has recognized WuXi AppTec for skillfully leveraging its expertise, well-positioning the company to capitalize on new growth opportunities, cementing its leadership in the global CRDMO industry.

WuXi AppTec operates across Asia, Europe, and North America, improving its capacity and capabilities to meet evolving market demands. The company is committed to staying at the forefront of scientific innovation, empowering customers with innovative technologies to advance their R&D efforts. WuXi AppTec aims to enhance customer retention, increase conversion rates (the number of molecules converted from research to development and manufacturing [D&M]), and meet customer demand while expanding its diverse talent pool to support sustained growth. Additionally, the company continuously enhances its integrated platform that fosters collaboration and innovation across the life science industry.

WuXi TIDES

WuXi AppTec strategically invests in new technologies and builds capabilities in emerging modalities to meet the evolving needs of the pharma and biotechnology (biotech) sectors. One of its key offerings, WuXi TIDES, is a unique CRDMO platform that provides efficient, flexible, and high-quality solutions for developing oligonucleotides, peptides, and related synthetic conjugates ("TIDES" drugs).

WuXi TIDES provides scalable solutions that support the entire drug development process, from discovery through commercialization, all within WuXi AppTec's expansive R&D and manufacturing infrastructure. The platform fosters seamless collaboration between oligonucleotide, peptide, and small molecule teams, ensuring efficient conjugation chemistry and integration across modalities. It also leverages cutting-edge technologies, such as biocatalysis to guide ribonucleic acid synthesis and advanced thin film evaporation for oligonucleotides, as well as reactor-in-series systems, continuous flow chromatography, and tangential flow filtration for peptide development. These technological advancements enhance the precision and efficiency of the drug development process.

With a single global quality system approved by regulatory agencies across multiple regions, WuXi TIDES ensures consistent and high-quality standards at every stage. The platform offers a comprehensive analytical framework covering method development, validation, in-process control, release testing, and stability assessments. Its integrated chemistry, manufacturing, and controls services span active pharma ingredient (API) process R&D, formulation development, manufacturing, analytical support, dossier preparation, and clinical supply services.

In 2023, WuXi TIDES demonstrated its impact by supporting approximately 50 peptide projects (from preclinical to commercial stages) and producing over 15 metric tons of peptide APIs and intermediates, thus highlighting its capacity to meet the growing demand for innovative therapies in the rapidly evolving pharma landscape.

Addressing Unmet Needs

With a robust team of over 1,000 scientists across ten R&D and manufacturing sites, WuXi TIDES offers a comprehensive range of services, including discovery synthesis, process development, and manufacturing of complex compounds. In addition to chemistry, the company supports formulation development, manufacturing, labeling, and distribution across various dosage forms, including lipid nanoparticle drug delivery. By offering an integrated solution that covers the entire discovery, development, and manufacturing supply chain under one roof, WuXi AppTec simplifies the TIDES drug development process, helping customers enhance productivity and reduce costs in advancing healthcare products.

WuXi AppTec addresses the unmet needs of large pharma companies and smaller, innovative firms by offering integrated, end-to-end R&D and manufacturing services. In response to challenges such as low R&D returns and the looming "patent cliff," large pharma companies increasingly turn to external partners like WuXi AppTec to enhance efficiency and reduce costs. Simultaneously, small and medium-sized pharma companies, which drive much of the industry's innovation, rely on the company's outsourcing services to quickly move from concept verification to product launch without the need for significant capital investments in their own R&D facilities.

WuXi AppTec is one of the few end-to-end platforms capable of supporting the entire drug R&D industry chain. Its broad portfolio includes chemistry drug CRDMO services, biology discovery, preclinical testing, clinical research, and advanced therapies through its contract testing, development, and manufacturing organization capabilities. By offering these comprehensive services, the company helps its clients improve productivity and advance healthcare products through cost-effective and efficient solutions, ultimately groundbreaking treatments to reach patients more quickly.

Best-in-class Industry Practices Retain a Competitive Edge

WuXi AppTec closely monitors the progress of new drug R&D projects, shifting from a traditional "following the project" approach to a more comprehensive "following the molecule" strategy that supports every stage of development. This shift allows the company to build trust with its customers and establish a strong reputation within the industry by leveraging its expertise to facilitate early-stage R&D efforts.

WuXi AppTec maximizes its global footprint and fully integrated industrial chain to foster synergy across its international operations, enhancing its ability to deliver value to customers. By expanding service offerings and platform capabilities, the company has seen steady growth in new and existing customers. A customer-centric approach lies at the core of WuXi AppTec's operations, as the company prioritizes delivering high-quality services that reduce barriers to drug development and support innovation.

This customer-focused strategy drives the development of new technologies, improves R&D efficiency, and reduces clients' costs. The company's efforts create a virtuous cycle that continually strengthens

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around the world."

- Ojaswi Rana Best Practices Research Analyst its platform's innovative capabilities, supporting the advancement of new drugs and enabling the pharma industry to deliver critical treatments to patients more effectively.

WuXi AppTec consistently meets diverse customer needs through expansive services and cutting-edge technologies. The company monitors the progress of new drug R&D projects closely, expanding the scope of its offerings to support clients throughout the development process. By prioritizing the principle of "enabling innovation," WuXi AppTec delivers its latest expertise and capabilities, helping customers turn their ideas into reality.

To stay ahead, the company invests in new modalities such as peptides, oligonucleotides, PROteolysis-targeting chimeras, conjugates, and advanced therapies, positioning itself to capture emerging business opportunities and support global medical innovation. WuXi AppTec's ongoing investment in facilities demonstrates the company's commitment to improving its platform. Recent developments include successfully ramping up new 55,000 square meter facilities in Qidong and Suzhou, China, and commissioning two new peptide manufacturing plants in Changzhou and Taixing, China, in early 2024. These expansions significantly

increase WuXi AppTec's solid-phase peptide synthesis capacity to meet the rising demand for peptide therapeutics.

Additionally, the company broke ground on a new API manufacturing site in Singapore for small molecules, oligonucleotides, peptides, and complex chemical conjugates with future facility development underway across Asia, North America, and Europe to better serve global customers. Furthermore, WuXi AppTec continually enhances its operational efficiency through digital transformation and automation, ensuring that its services remain competitive, scalable, and responsive to the evolving needs of the pharma and biotech industries.

Frost & Sullivan is impressed by WuXi AppTec's proactive approach to addressing evolving pharma and biotech needs through its unique CRDMO business model, which enables the company to foster scientific innovation, develop distinct insights, and leverage opportunities in new molecules. By continuously enhancing its capabilities and capacity, WuXi AppTec supports the industry and customers to bring groundbreaking therapies to patients around the world.

Commitment to Customer Satisfaction and Operational Excellence Ensure Superior Service

WuXi AppTec prioritizes customer satisfaction through a globally integrated platform, robust systems, and a focus on operational excellence. The company leverages more than 30 sites across nine countries to serve over 6,000 customers, ensuring a global reach while maintaining high environmental, social, and governance compliance standards.

WuXi AppTec's Business Continuity Plan ensures resilience by delivering services through multiple sites with built-in redundancies, demonstrating reliability even in challenging circumstances. Strategic relationships with top suppliers and a robust, diverse network that facilitates seamless material flow and access to critical logistics infrastructure bolsters its supply chain resiliency.

To ensure smooth service delivery, WuXi AppTec's integrated management team and global business development units work in tandem to guarantee seamless customer engagement and feedback. The company's adherence to international standards such as Good Laboratory Practice, Good Clinical Practice, and Good Manufacturing Practice, with a strong track record of successful inspections and consistent quality systems across multiple facilities, reflects its commitment to quality.

Additionally, WuXi AppTec's standardized lab design and state-of-the-art information technology infrastructure ensures operational synergy and secure data management, with 81% of its main operational sites holding International Organization for Standardization (ISO) 27001 certification for information security. This comprehensive approach allows the company to deliver unparalleled value, helping customers achieve their goals with confidence and efficiency.

Additionally, WuXi AppTec actively collects customer feedback through regular satisfaction surveys, achieving a 98% satisfaction rate in 2023, and continuously implements improvements based on client input. It adheres to its "Put Customers First" principle by promptly addressing customer concerns through well-established hotlines and communication channels. WuXi AppTec meticulously records, analyzes, and

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⁴ Frost & Sullivan's Interview with WuXi AppTec, (August 28, 2024).

⁵ Frost & Sullivan's Interview with WuXi AppTec, (August 28, 2024).

reviews all feedback to identify areas for improvement. The company also conducts post-event surveys to continuously refine service quality.

WuXi AppTec focuses on building trust and credibility and maintaining a customer-first approach. The company delivers high-quality, efficient services while upholding strict intellectual property protections. A comprehensive customer relationship management system and a clear and efficient service response mechanism ensure prompt and reliable support, fostering long-term client relationships. WuXi AppTec regularly conducts specialized training for customer service staff to reinforce service excellence and enhance the overall customer experience.

Frost & Sullivan commends WuXi AppTec for its exceptional commitment to customer satisfaction, which is driven by a globally integrated platform, strategic supply chain resiliency, and adherence to the highest quality standards. The company's proactive customer feedback mechanisms and a strong focus on continuous improvement and staff training underscore its dedication to delivering outstanding value and maintaining long-term client relationships.

Positioned for Continued Growth with Strong Financial Performance and Industry Leadership

For the first half of 2024, WuXi AppTec achieved sustained and steady business growth, with its second-

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- Ojaswi Rana Best Practices Research Analyst quarter revenue and profits showing quarter-overquarter improvements. The company added over 500 and maintained the existing base of over 6,000 active customers. As of June 30, 2024, WuXi AppTec's backlog achieved RMB 43.1 billion, growing 33.2% year-overyear (excluding COVID-19 commercial projects). This consistent business growth is attributed to the unique fully-integrated CRDMO platform.

Notably, as one of the key business segments of the company, WuXi Chemistry has continued to grow its small molecule D&M pipeline, with a total of 644 new molecules added, reaching 3,319 molecules, among which 14 commercial and Phase III projects were added. Specifically, WuXi TIDES sustains rapid growth with revenue growing strongly by 57.2% year-over-year to

RMB 2.08 billion, and the backlog growing 147% year-over-year. 10

⁶ WuXi AppTec, "WuXi AppTec," Despite External Challenges, WuXi AppTec Maintained Stable Operations in First Half of 2024; Revenue and Profit of the Second Quarter Both Steadily Improved QoQ as Expected, with Revenue Up 16.0% QoQ and Adjusted Non-IFRS Net Profit Up 28.5% QoQ, July 29, 2024, https://www.wuxiapptec.com/news/wuxi-news/5941.

⁷ Ibid.

⁸ Ibid.

⁹ WuXi AppTec, "WuXi AppTec," Despite External Challenges, WuXi AppTec Maintained Stable Operations in First Half of 2024; Revenue and Profit of the Second Quarter Both Steadily Improved QoQ as Expected, with Revenue Up 16.0% QoQ and Adjusted Non-IFRS Net Profit Up 28.5% QoQ, July 29, 2024, https://www.wuxiapptec.com/news/wuxi-news/5941.

¹⁰ Ibid.

The company is poised for continued growth, driven by technological advancements and scientific innovation, which increase global demand for life-saving and novel drugs. WuXi AppTec's integrated CRDMO business model positions it effectively to meet this rising demand, allowing it to stay at the forefront of scientific advancements, capitalize on emerging opportunities, and drive robust business growth. Despite external uncertainties, the company anticipates its revenue to reach between RMB 38.3 billion and RMB 40.5 billion in 2024, reflecting a growth rate of 2.7% to 8.6% when excluding COVID-19 commercial projects. This forecast underscores WuXi AppTec's resilience and strategic alignment with industry trends, positioning it for sustained success in the evolving global pharma landscape. The company's leadership focus centers on being a pivotal partner, enabler, and contributor within the global life science ecosystem. WuXi AppTec supports clients through its CRDMO model, which drives innovation and addresses evolving industry needs. Additionally, the company is committed to contributing to the broader healthcare landscape by organizing influential events and engaging in initiatives to support rare diseases. Frost & Sullivan believes this approach reflects WuXi AppTec's dedication to advancing scientific progress, fostering industry collaboration, and working towards the vision of making every drug and treating every disease for patients in need.

Conclusion

The pharmaceutical (pharma) industry faces a critical need for integrated end-to-end research and development (R&D) and manufacturing solutions amid rising R&D investments and complex regulatory environments. Overall, WuXi AppTec addresses this need with its unique

contract research, development, and manufacturing organization (CRDMO) model, including the WuXi TIDES platform, which supports seamless drug development from discovery to commercialization. Additionally, the company tackles the challenge of evolving scientific and regulatory landscapes by providing cutting-edge technologies and a global quality system, helping large and small pharma companies accelerate development, improve productivity, and manage costs effectively.

WuXi AppTec actively gathers and analyzes customer feedback through regular satisfaction surveys and post-event assessments and implements continuous improvements based on client input. Additionally, the company maintains a comprehensive customer relationship management system and provides specialized training for its customer service staff, ensuring prompt, high-quality support and fostering long-term client relationships.

The company's impressive financial performance and its strategic contributions to global healthcare exemplify its standing as a trusted industry leader. WuXi AppTec's substantial revenue growth and expansion of its customer base across 30 countries highlight its effectiveness and reliability in delivering integrated CRDMO solutions. Additionally, the company's leadership in organizing impactful events and supporting initiatives for rare diseases, reinforcing its role as a key enabler of scientific progress and collaboration in the industry, demonstrates its commitment to advancing healthcare.

With its strong overall performance, WuXi AppTec earns Frost & Sullivan's 2024 Global Company of the Year Award in the CRDMO industry.

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¹¹ Ibid.

What You Need to Know about the Company of the Year Recognition

Frost & Sullivan's Company of the Year Award is its top honor and recognizes the market participant that exemplifies visionary innovation, market-leading performance, and unmatched customer care.

Best Practices Award Analysis

For the Company of the Year Award, Frost & Sullivan analysts independently evaluated the criteria listed below.

Visionary Innovation & Performance

Addressing Unmet Needs: Customers' unmet or under-served needs are unearthed and addressed by a robust solution development process

Visionary Scenarios Through Mega Trends:

Long-range, macro-level scenarios are incorporated into the innovation strategy through the use of Mega Trends, thereby enabling first-to-market solutions and new growth opportunities

Leadership Focus: Company focuses on building a leadership position in core markets and on creating stiff barriers to entry for new competitors

Best Practices Implementation: Best-in-class implementation is characterized by processes, tools, or activities that generate a consistent and repeatable level of success

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

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

About Frost & Sullivan

Frost & Sullivan is the Growth Pipeline Company™. We power our clients to a future shaped by growth. Our Growth Pipeline as a Service™ provides the CEO and the CEO's growth team with a continuous and rigorous platform of growth opportunities, ensuring long-term success. To achieve positive outcomes, our team leverages over 60 years of experience, coaching organizations of all types and sizes across 6 continents with our proven best practices. To power your Growth Pipeline future, visit Frost & Sullivan at http://www.frost.com.

The Growth Pipeline Engine™

Frost & Sullivan's proprietary model to systematically create ongoing growth opportunities and strategies for our clients is fuelled by the Innovation Generator $^{\text{TM}}$.

Learn more.

Key Impacts:

- **Growth Pipeline:** Continuous Flow of Growth Opportunities
- **Growth Strategies:** Proven Best Practices
- Innovation Culture: Optimized Customer Experience
- ROI & Margin: Implementation Excellence
- Transformational Growth: Industry Leadership

OPPORTUNITY UNIVERSE Capture full range of growth opportunities and prioritize them based on key criteria OPPORTUNITY EVALUATION Adapt strategy to changing market dynamics and unearth new opportunities OPPORTUNITY EVALUATION Conduct deep, 360-degree analysis opportunities PIPELINE ENGINETM GO-TO-MARKET STRATEGY Translate strategic alternatives into a cogent strategy and deadlines

The Innovation Generator™

Our 6 analytical perspectives are crucial in capturing the broadest range of innovative growth opportunities, most of which occur at the points of these perspectives.

Analytical Perspectives:

- Mega Trend (MT)
- Business Model (BM)
- Technology (TE)
- Industries (IN)
- Customer (CU)
- Geographies (GE)

