



Global Platform. One Vision.

WuXi AppTec

Statistics as of Q3 2024 (September 30, 2024)



About WuXi AppTec

As a global company with operations across Asia, Europe, and North America, WuXi AppTec provides a broad portfolio of R&D and manufacturing services that enable the global pharmaceutical and life sciences industry to advance discoveries and deliver groundbreaking treatments to patients. Through its unique business models, WuXi AppTec's integrated, end-to-end services include chemistry drug CRDMO (Contract Research, Development and Manufacturing Organization), biology discovery, preclinical testing and clinical research services, advanced therapies CTDMO (Contract Testing, Development and Manufacturing Organization), helping customers improve the productivity of advancing healthcare products through cost-effective and efficient solutions.

Our Vision

“Every drug can be made and every disease can be treated” through building the open-access platform with the most comprehensive capabilities and technologies in the global healthcare industry.

Enabler of Innovation

Trusted Partner

Global Contributor



2000

from one single chemistry lab

from one customer

from four co-founders



2024

▶ to a global platform with 32 sites worldwide

▶ to more than 6,000 customers

▶ to more than 38,000 employees globally, including over 35,000 scientists and technicians

A Global Footprint

32 sites across 9 countries

 China		 U.S.		 Germany		 U.K.				
Shanghai	R&D Headquarters / Drug Discovery and Preclinical / Clinical / Regulatory	Changshu	Small Molecule R&D and Manufacturing	Philadelphia	PA	Advanced Therapies R&D and Manufacturing	Munich	Drug Discovery /Biology/Medical Device Preclinical Testing	Oxford	Advanced Therapies R&D and Manufacturing
Jinshan (Shanghai)	Small Molecule R&D and Manufacturing	Wuxi	Small Molecule Manufacturing / Advanced Therapies R&D and Manufacturing	Boston / Natick	MA	Compound Management / Logistics Center / Program Management				
Changzhou	Small Molecule R&D and Manufacturing	Tianjin	Chemistry and Drug Discovery	Cranbury	NJ	DMPK and Biology	 Switzerland	 Israel		
Suzhou	Drug and Medical Device Safety Evaluation	Chengdu	Drug Discovery and Preclinical / Clinical	Plainsboro	NJ	Bioanalytical Testing	Couvet	Small Molecule Manufacturing	Tel Aviv	Program Management
Nanjing	DMPK and Bioanalytical	Wuhan	Chemistry and Drug Discovery / Clinical	Atlanta	GA	Medical Device Integrity / Sterility Testing				
Nantong	Small Molecule R&D	Beijing	Clinical / Regulatory	St. Paul	MN	Medical Device Preclinical Testing	 South Korea	 Japan		
Taixing	Small Molecule R&D and Manufacturing	Guangzhou	Program Management / Clinical	Austin	TX	Clinical Development Service	Pan-Gyo	Program Management	Kyoto	BD / Program Management
				San Diego	CA	Biology / Small Molecule Process Development and Manufacturing / Clinical Development Service				
				San Francisco	CA	Compound Management / Logistics Center	 Singapore			
				Middletown	DE	Small Molecule Manufacturing	Singapore	Small Molecule R&D and Manufacturing		

CHALLENGES FACING TODAY'S HEALTHCARE INDUSTRY

Lengthy R&D Process

>10 years from discovery to market

High R&D Costs

> USD \$2Bn per drug on average¹

Low Success Rates

< 10% success rate from Phase I to filing²

Availability & Affordability

7,000+ rare diseases mostly underserved

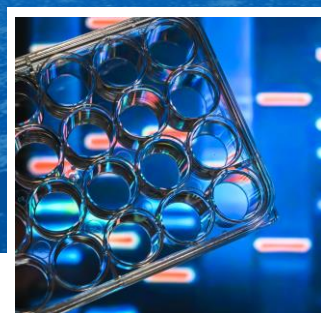
Source: 1. Deloitte January, 2023, based on the top 20 pharma companies by R&D spend. 2. IQVIA, February, 2023

Integrated, End-to-End CRDMO & CTDMO Enabling Platform

Our open-access capabilities and technology platforms deliver quality service – and help customers achieve their goals more quickly – by lowering the cost of research and development and shortening the time required to discover and produce new medicines.



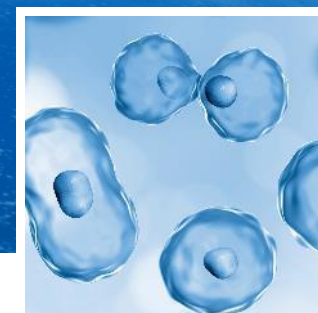
WuXi Chemistry



WuXi Biology



WuXi Testing



WuXi ATU





A comprehensive CRDMO platform meeting any material requirement throughout the entire new drug development process, capable at any scale and covering all categories for all synthetic molecular modalities.

- **450,000+** compounds (in the past 12 months); **3,356** preclinical, clinical and commercial drugs, including **79** Phase III clinical candidates and **68** commercial drugs (as of Q3 2024)
- Successful inspections by U.S. FDA, EU EMA, China NMPA, Japan PMDA, South Korea MFDS, and SwissMedic, and over **100** country approvals for branded drugs
- **500+** CMC submission packages written to support global IND and NDA filings from 2019 to 2023

Research Chemistry

Small Molecule “R”esearch

- Medicinal Chemistry | Custom Synthesis | Library | Discovery Process Chemistry
- 9,800+ scientists
- Delivered 450,000+ compounds (in the past 12 months)
- Technology Platform: Reaction Conditions Screening, Photoredox Chemistry, Flow Chemistry, Biocatalysis, Electrochemistry, Computer-Aided Drug Design
- Specialty Chemistry: Targeted Covalent Inhibitor, Targeted Protein Degradator, Fluorine Chemistry, Carbohydrate, Macrocyclic, Boron, Stable Isotope Labeling

WuXi STA

Small Molecule “D”evelopment and “M”anufacturing

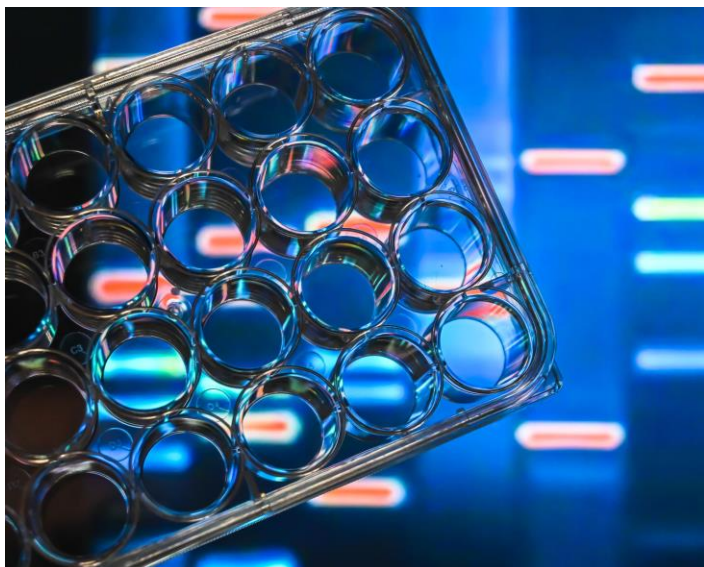
- Drug Substance | Drug Product | Analytical | Regulatory Dossier Preparation
- 4,600+ scientists
- 3,200+ m³ total reactor volume for small molecule API and intermediate manufacturing
- Drug Substance Enabling Technology Portfolio: Crystallization & Particle Engineering, Biocatalysis, Chemo Catalysis, Flow Chemistry, Preparative HPLC & SFC & SMB, High Potency API
- 5 drug product sites in North America, Europe, and Asia, supporting both oral solid and parenteral dosage forms
- Drug Product Enabling Technology Portfolio: Spray Dried Dispersion, Nano Suspension, Hot Melt Extrusion, Lipid Nanoparticle, High Potency Drug Product

WuXi TIDES

Oligonucleotides and Peptides “R”esearch, “D”evelopment and “M”anufacturing


- Oligonucleotides | Peptides | Conjugates | Amidites | Unnatural Amino Acids | Linkers | Ligands
- Simplifying the TIDES drug development by providing all discovery, CMC development and the entire manufacturing supply chain under one roof
- 1,000+ scientists
- Over 20 oligonucleotide production lines at all scales
- 32,490 L peptide solid phase total reactor volume
- Novel technology platforms: Biocatalysis, Thin Film Evaporation, TFF/precipitation, Continuous Purification





A comprehensive spectrum of biology services and solutions, supporting stand-alone and integrated projects, from target discovery to hit finding, lead optimization, candidate selection, and beyond.

- **Comprehensive** discovery and translational biology centers, with **~3,000** experienced scientists and global footprints in **9** sites
- Early discovery screening platform, providing diverse hit finding solutions such as DEL/HTS/ASMS/FBDD* and virtual screening, supported by **cutting-edge** informatics and data sciences
- **Thousands** of validated, 'ready to go', *in vitro* assays and *in vivo* models enabling discovery biology for comprehensive target classes, therapeutic areas and modalities
- Extensive **Oncology, Immunology, Infectious Disease, Inflammation, Neuroscience and Metabolic Disease indication**, offering an end-to-end service from discovery, through optimization and into clinical development
- **AAALAC** accredited and **BSL-2** certified on multiple sites
- **CAP-certified** pathology and FACS capabilities supporting clinical biomarker services

	Modalities	Early Discovery	Lead Optimization	<i>In Vivo</i> pharmacology
	<ul style="list-style-type: none"> • Small molecules and peptides • Oligonucleotides • Bi-functional molecules, e.g. ADC/PDC/POC/TPD* • Vaccines • CGT 	<ul style="list-style-type: none"> • Cellular and <i>in vivo</i> disease model construction • Protein science and crystallography • Hit Identification & Screening: FBDD/HTS/DEL/ASMS/VS and libraries for small molecules, Covalent, Peptides, TPD* & Macrocycles 	<ul style="list-style-type: none"> • <i>In vitro</i> biochemistry and cell biology • Cell panel screening • MOA studies • Radiometric assays • Clinical biomarker development and validation 	<ul style="list-style-type: none"> • Comprehensive <i>In vivo</i> disease model collection • Targeted oncology and immunology • Drug resistance and other novel models of higher translational value • Tumor model database

*HTS: High Throughput Screening; DEL: DNA Encoded Library; ASMS: Affinity Selection Mass Spectrometry Screening; FBDD: Fragment-based Drug Discovery; TPD: Targeted protein degradation

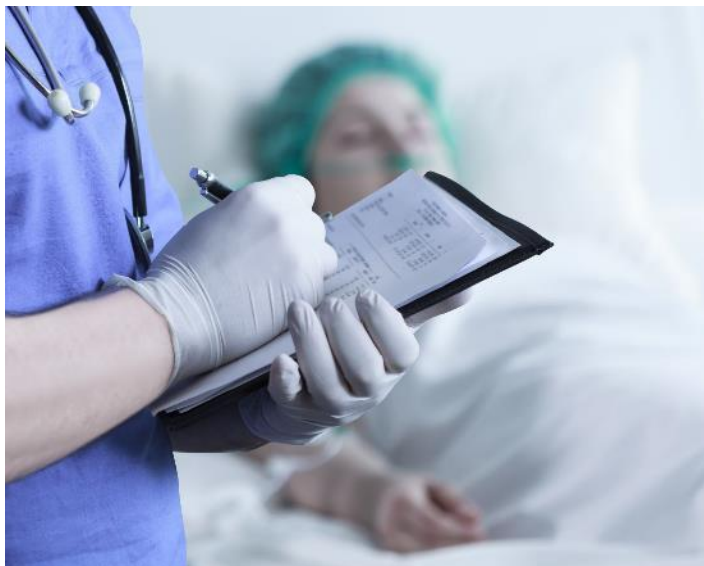


An integrated testing platform across the full life cycle of discovery and development to deliver innovative medicines, medical devices and combination products to patients.

- Comprehensive *in vitro* and *in vivo* global DMPK services
- Preclinical services including GLP toxicology and safety pharmacology for successful Investigational New Drug (IND) / New Drug Application (NDA) filings
- GLP global bioanalytical services based on both LC-MS/MS and immunochemistry platforms
- GLP global medical device testing and regulatory consulting including chemical characterization, toxicological risk assessment and biocompatibility testing along with a full suite of microbiology services



- WuXi IND (WIND): A full IND one-package submission that includes WuXi CMC, preclinical (disease specific pharmacology, DMPK, toxicology, and bioanalysis), clinical and regulatory affairs services.
- Long term toxicology, developmental DMPK and clinical bioanalysis in conjunction with clinical & CMC services that enable customers to move the molecules from IND to NDA.



Comprehensive solutions for pharmaceuticals and medical, covering bioequivalence, Phase I to Phase IV clinical development services, and Real World Study.

- Enable global clinical development through operation in China, the U.S, and Australia; **13** offices and **730+** employees worldwide, **2,800+** clinical trial sites globally including **1700+** sites in China
- Average **10**-year industry experience for Project Management (PM) / Clinical Operations (CO) / Biostatistics and Regulatory Affairs teams
- Successfully conducted **1,100+** clinical trial studies
- **~5,000** experienced CRCs in around **150** cities across China
- Site management services for **3,000+** Phase I-IV clinical trial projects, in which **200+** new drugs and medical devices passed China NMPA, EMA and U.S. FDA inspection supporting their final approval by regulators

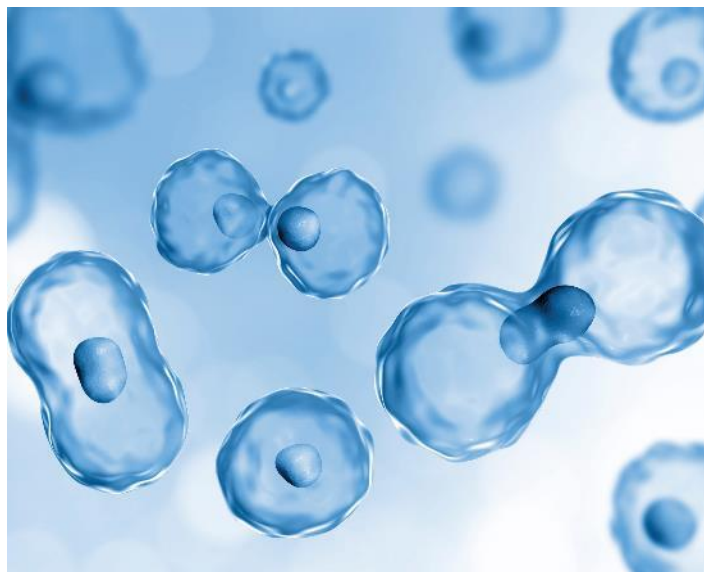
Clinical Development Services

- PM/Clinical Operation
- Regulatory Affairs
- Medical Affairs
- Pharmacovigilance
- eCTD, PV System
- Early Clinical Development
- Biostatistics
- Quality Systems Management & Consulting
- AI Coding, AI Translator
- Medidata Rave EDC

Site Management Organization

- SMO Services (Site Operation)
- Patient Recruitment & Management
- Site Network Covering 1,000+ Sites
- Feasibility & Site Selection
- Fast Site Start-up
- PMS & Academic Research Organization RWS





A Contract, Testing, Development and Manufacturing Organization (CTDMO) that offers integrated platforms to transform discovery, development, testing, manufacturing, and commercialization of advanced therapies.

- Global CTDMO business model integrates powerful testing capabilities with process development and manufacture
- Transformational TESSA® platform for AAV manufacture produces >10x more AAV than triple transfection
- XOFLX™ Stable Lentiviral technology platform launching in H1 2023 to transform lentiviral vector manufacture
- Development, testing and manufacturing services for **59** projects, incl. **2** commercial, **4** Phase III (**1** in BLA preparation stage), **8** Phase II and **45** pre-clinical and Phase I projects, as of September 30, 2024.
- Support for **1,700+** customers' global submissions with biosafety testing over **20** years; **40+** commercial lot release testing programs: mAb, protein, vaccine, and advanced therapies
- Global integrated manufacturing and testing facilities in Philadelphia, Pennsylvania, USA; supported by further infrastructure in EU and Asia Pacific

Premier CTDMO

- Discovery to GMP integrated manufacturing and testing partner
- Proprietary platforms and technologies accelerate progress to market for advanced therapies, including TESSA®, Transient AAV, Transient Lentiviral, XOFLX™ Stable Lentiviral packaging and producer cell lines, and closed CAR-T manufacturing platform.
- R&D to GMP plasmid DNA banking & manufacturing
- Dedicated process development & analytical development
- Quality Control & Management System, Testing and Regulatory Support

Integrated Testing

- Strong Assay Development Capabilities and Expertise
- Molecular, Virology, Microbiology, and Analytical Testing Expertise
- Biosafety Testing that Can Support Global Submissions
- Commercial Lot Release Programs
- Market Leader in Viral Clearance
- Partner with the majority of CDMOs to provide release testing of their AAV, Adeno, Retroviral, and Lentiviral vectors





Data security and privacy protection are among our highest priorities. Since our founding, WuXi AppTec has maintained a strong track record of data privacy based on rigorous security processes. Everything we discover, develop and deliver to our customers is secure, separated and protected.

Unwavering Commitment to Customers' IP Protection and the Highest Quality & Compliance Standards



748¹

Quality Audits & Inspections by Global Customers, Regulatory Authorities and Independent Third Parties in 2023



83

Information Security Audits by Global Customers in 2023, with **0 Critical Findings**



100%

Pass Rate with **0 Critical Findings**



24²

Main Operating Sites are **ISO/IEC 27001 Certified**

Note: 1. Including 687 audits by customers, 59 inspections by regulatory authorities, and 2 audits by independent third parties.

2. Including all the main operating sites in China.

Adhering to Global Regulatory Standards



CMC platform (drug substance, drug product, analytical and regulatory CMC support) received FDA approval for New Chemical Entities

CDMO approved by regulatory agencies in U.S., Canada, EU, Switzerland, China, Australia and New Zealand to supply APIs, GMP intermediates for branded commercial drugs

First CDMO to support the approval of an innovative drug in China through the Marketing Authorization Holder (“MAH”) pilot program

GLP toxicology laboratory certified by both OECD and NMPA, and passed FDA and NMPA inspections

GLP/GCP bioanalytical laboratory passed FDA, OECD, NMPA and PMDA inspections

Medical device testing facility certified by CNAS, CMA and EMA and registered with FDA

Advanced therapies CDMO passed inspections from TGA, EMA, PMDA and FDA

Fighting Diseases by Enabling High-Quality Medicines Faster

Advanced development of therapy approved by FDA and NMPA for the treatment of adult patients with **chronic hepatitis C virus genotypes 1 and 4 infections**

Advanced development of first oral-targeted therapy approved by FDA for the treatment of adult patients with **relapsed or refractory acute myeloid leukemia** with an isocitrate dehydrogenase-2 mutation

Supported the development of the first oral therapy approved by FDA and NMPA for the treatment of patients with **chronic lymphocytic leukemia, mantle cell lymphoma and Waldenström's macroglobulinemia**

Supported the acquisition of implied license of clinical trial from FDA for a small molecule drug for the treatment of **Alzheimer's Disease**

Provided all-round support for a BTK inhibitor to receive accelerated NDA approval for treatment of **mantle cell lymphoma** from FDA

Supported the first **individualized T cell therapy for a solid tumor cancer**, from research to clinical manufacturing to FDA approval.

Trusted by Over 6,000 Customers



Our Commitment to Environmental, Social and Governance (ESG)

As a responsible corporate citizen, WuXi AppTec remains steadfast in its commitment to patients, customers, investors, employees, and communities to operate in a sustainable way both today and in the future.

Improved governance structure

The Board of Directors empowered the ESG Committee, ESG Office and Working Team to promote the implementation of ESG strategies and goals.

Advocate for diversity and inclusion

We value and respect the differences of our people and nurture a diverse and inclusive company culture. In 2023, **54.51%** of our workforce are women.

Reduce environmental impact

Compared to a 2020 baseline, by 2030 we are determined to reduce energy consumption intensity and carbon emission intensity by **25%** respectively, and water use intensity by **30%**.

Give back to local communities

By following the Company's Philanthropy and Sponsorship Policy and Principles, we continuously manage our philanthropic actions strategically to actively serve the community.



MSCI ESG Ratings in 2021-2024
AA



Named to S&P DJSI consecutively in 2021-2023



Climate Change in 2022-2023: **A-**
Water Security score in 2023: **A-**



Awarded as Industry and Regional Top-Rated company consecutively by Sustainalytics in 2023-2024

Convener of the Global Healthcare Community

Explore cutting edge advances in health and medicine



WuXi Global Forum

Annual event that brings together trailblazing industry leaders, scientific innovators, and leading healthcare professionals who are striving for and achieving the latest breakthroughs for patients around the world

Convene industry leaders to share insights on the future of healthcare



WuXi Healthcare Forum

Annual event that provides a deep dive into industry advances and how – through innovation – its members are propelling cutting edge ideas to overcome unmet healthcare needs

Foster scientific collaboration as new diseases emerge



Online Forums on COVID-19

A series of 2020 online symposiums that tackled one of the most immediate and widespread healthcare challenges in recent times

Raise awareness of rare diseases and inspire innovation



Rare Disease Webinars

A series of webinars that extend support to the international rare disease community to benefit patients. WuXi AppTec is committed to keeping rare diseases a focus of attention since there is still much progress to be made

Harness the collective power in a new era of healthy aging



Dialogues on Healthy Aging

A series of dialogues in solidarity with the UN's Decade of Healthy Aging 2021-2030 to share the leading voices at the forefront of tackling the global aging challenges

Awards and Industry Recognition

Partially Listed



Industry Leadership



Global Contract Research, Development and Manufacturing Organization Company of the Year (2022-2024)



Ranked among “The Future 50” (2020-2021)



50 Smartest Companies (2019)



Company of the Year (2018)



Heroes of Chemistry Award (2017)



Best Company in an Emerging Market (2014)

ESG



Named to the S&P Global Sustainability Yearbook consecutively in 2023-2024

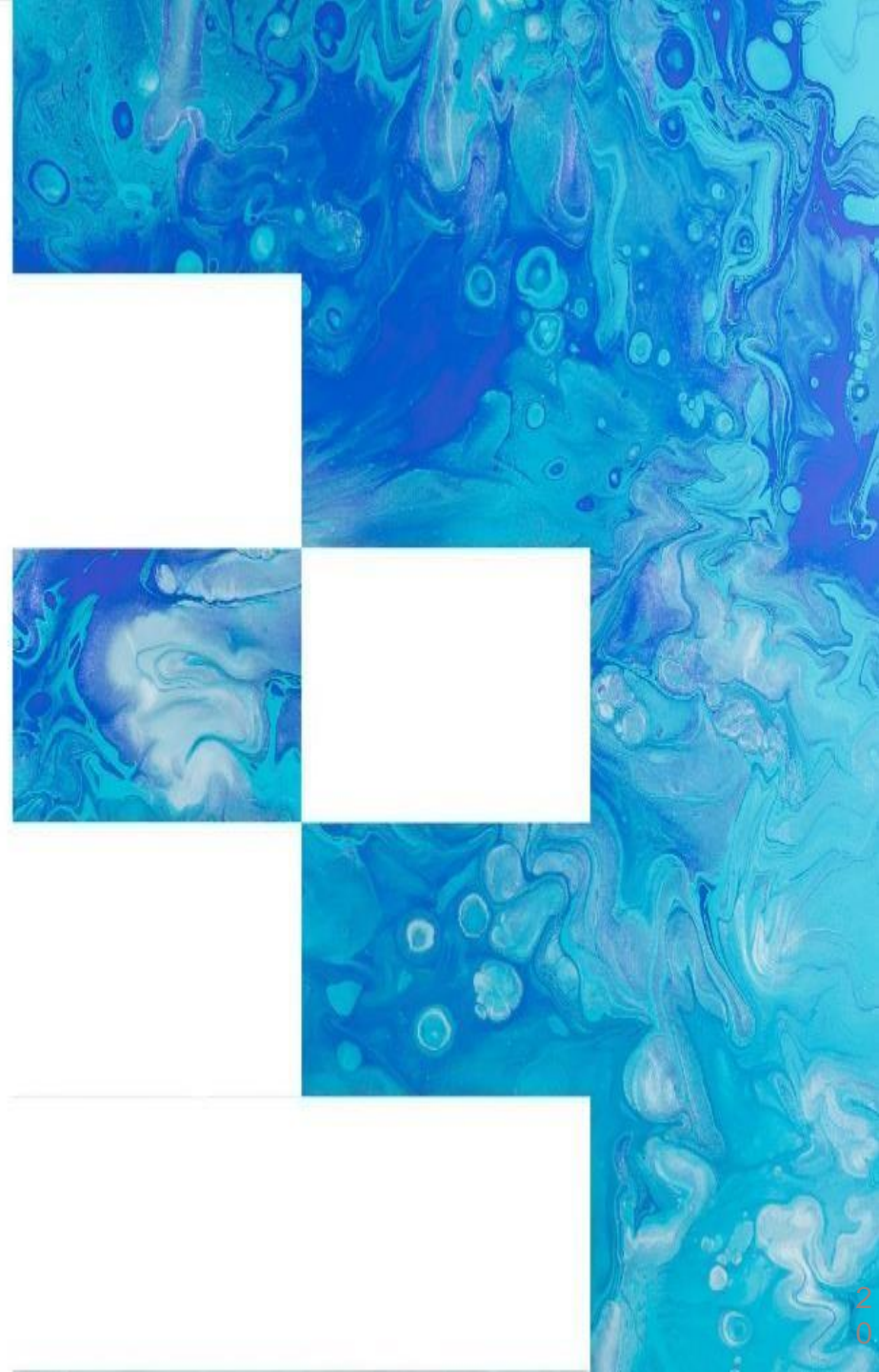


CDP “Environmental Leadership Award” in 2022-2023



“Silver” rating by EcoVadis in 2023

WuXi Chemistry



Unique CRDMO Model



450,000+

DISCOVERY

Compounds Synthesized

Every **2,500** compounds yield **1** preclinical candidate

3,288

PRECLINICAL to PHASE 3

Drugs

We support **1** out of **7** global clinical programs

68

COMMERCIAL

Drugs

We produce **4** out of **10** global top-selling small molecule drugs

In the last 12 months (2023 Q4-2024 Q3)

China



Shanghai Waigaoqiao



Tianjin



Wuhan, Hubei



Chengdu, Sichuan



Qidong, Jiangsu



Shanghai Jinshan



Changzhou, Jiangsu



Changshu, Jiangsu



Taixing #1, Jiangsu



Taixing #2, Jiangsu



Wuxi city, Jiangsu



United States



San Francisco, CA



San Diego, CA



Middletown, DE



Switzerland



Couvet, Neuchâtel



Singapore



Singapore



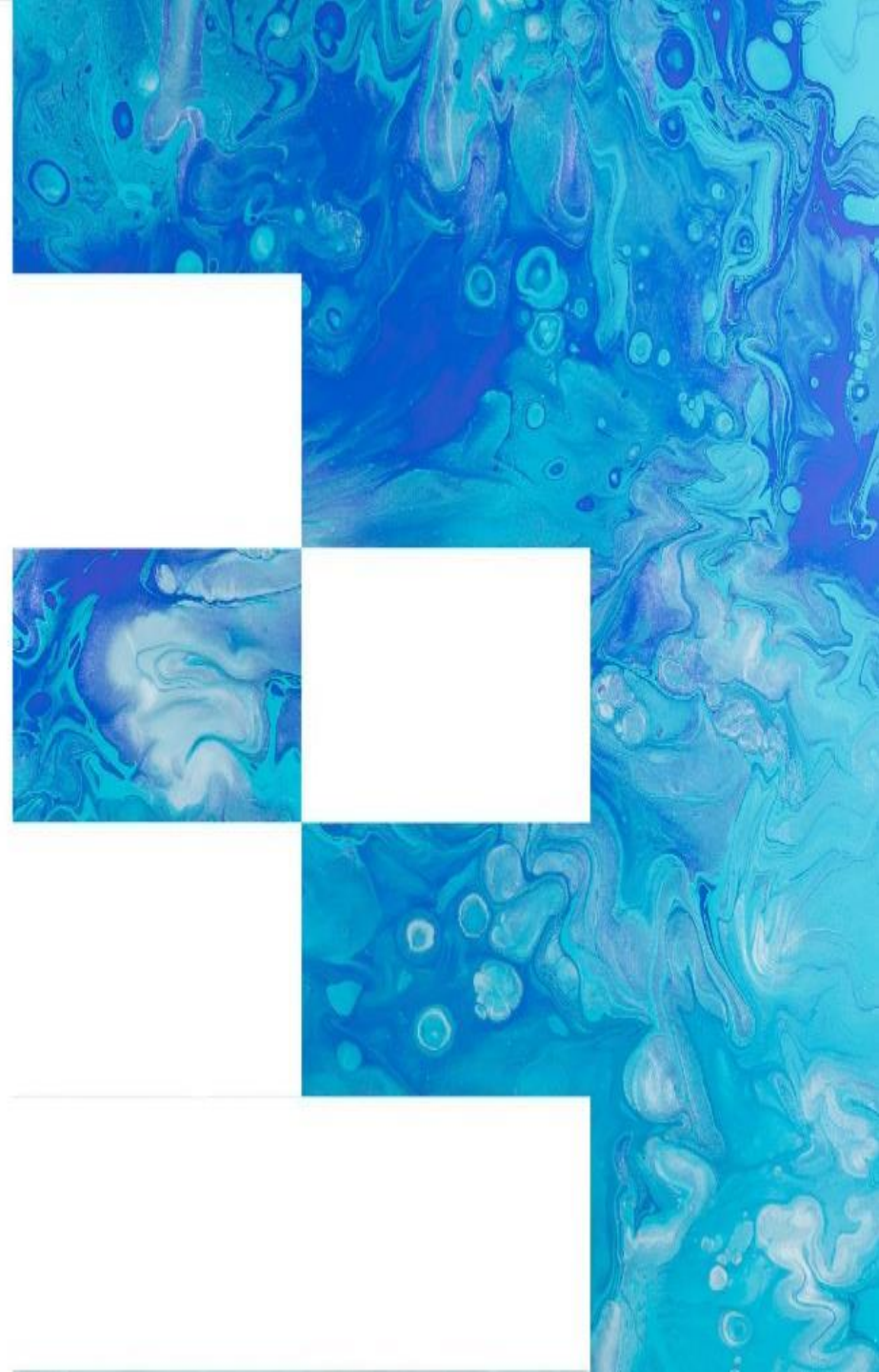
16 sites

22,258 employees

2,477 clients worldwide

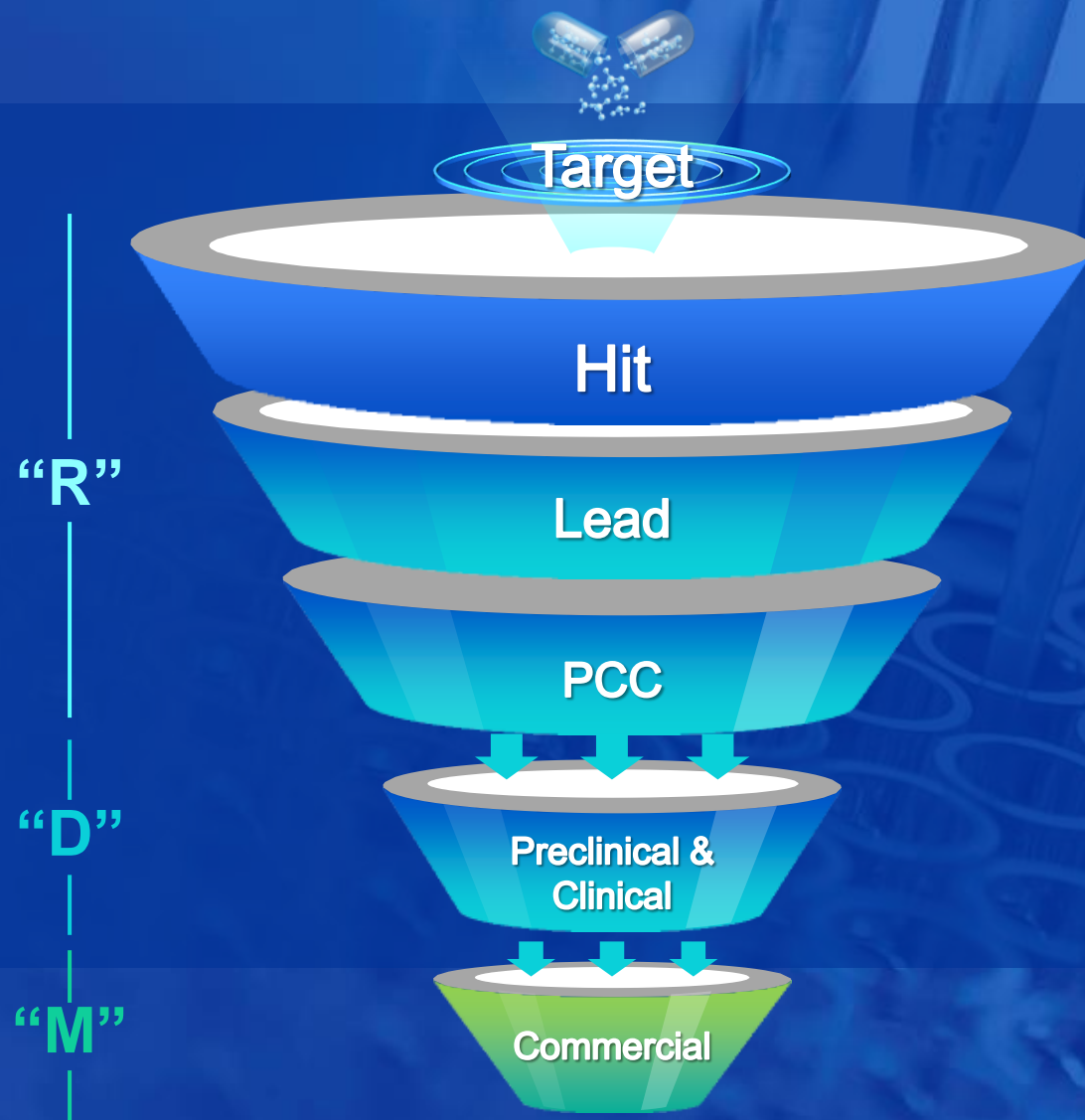
Research Chemistry Services

RCS



RCS Mission

Providing solutions towards accelerating the discovery of hits, leads and preclinical candidates for our global business partners by the leading chemistry platform.



Leadership Team



Jingchao Dong, Ph.D.
SVP, Head of WuXi AppTec RCS

Over 20 years' experience



Tao Guo, Ph.D.
SVP, Head of RCS BD Team

Over 20 years' experience;
formerly at ARIAD and Pharmacopeia



Xiang Wu, Ph.D.
VP, WH Site

Over 15 years' experience;
formerly at AMRI



Xuedong Dai, Ph.D.
VP, SH Site

Over 20 years' experience;
formerly at Janssen Shanghai
site as the head of Chemistry,
and at GSK



Duan Liu, Ph.D.
VP, CD Site

Over 15 years' experience;
Previously Research Leader at Merck Boston;
Postdoc at Harvard with E. J. Corey;
Inventor of Duanphos.



Zhiliu Zhang
VP, SH Site

Over 20 years' experience



Bin Hu, Ph.D.
VP Scientist & Exec. Dir, SH Site

Over 20 years' experience;
ACS Heroes of Chemistry Award 2017



Yan Xu, Ph.D.
Exec. Dir, SH Site

Over 20 years' experience



Rongfeng Zhao
VP, Head of COE

Over 17 years' experience



Yingying Yuan
Exec. Dir, Head of CAS

Over 10 years' experience

RCS Footprint



Shanghai Waigaoqiao
China



Tianjin
China



Wuhan, Hubei
China



Nantong, Jiangsu
China



Chengdu, Sichuan
China

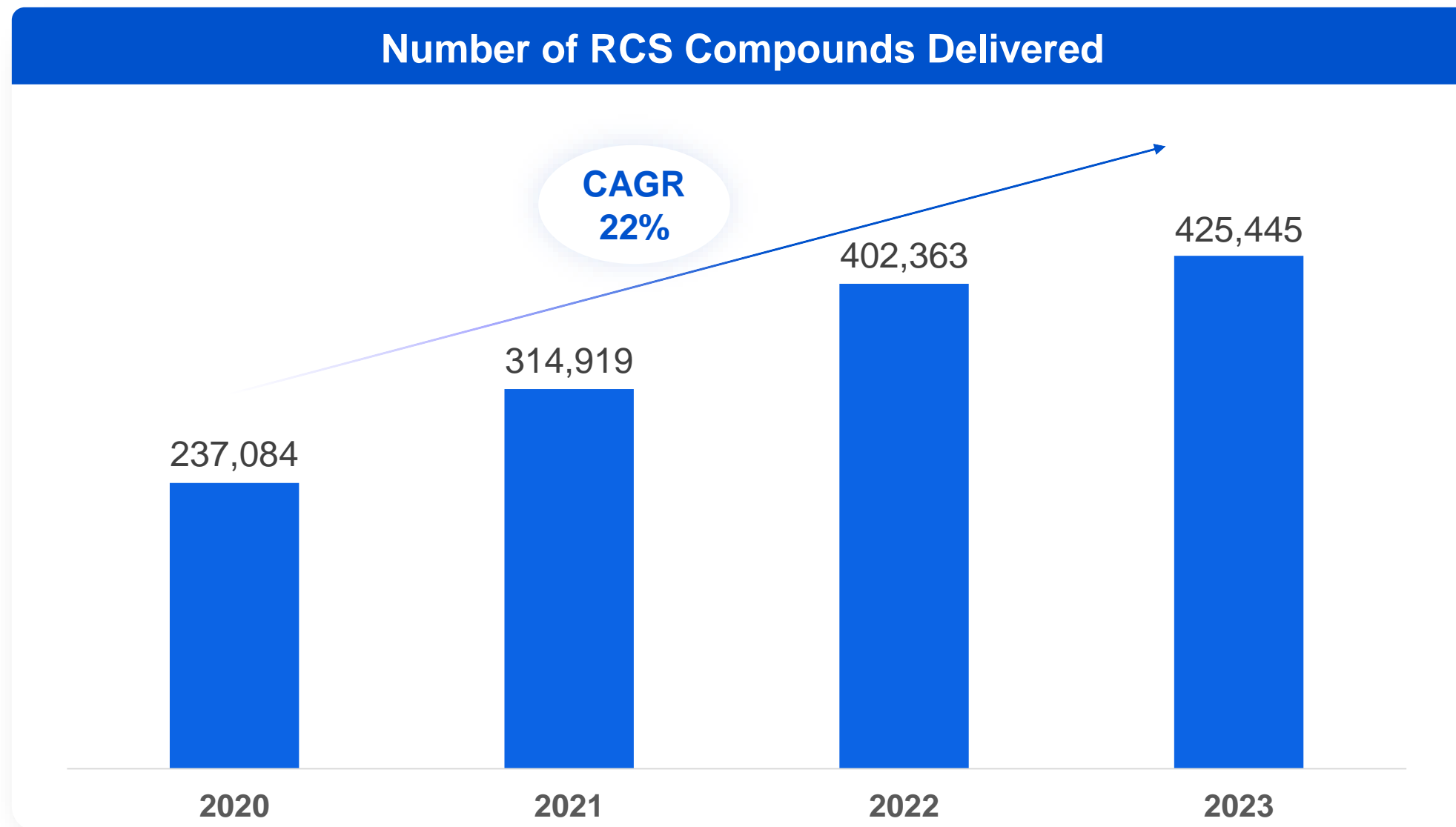


San Francisco
US

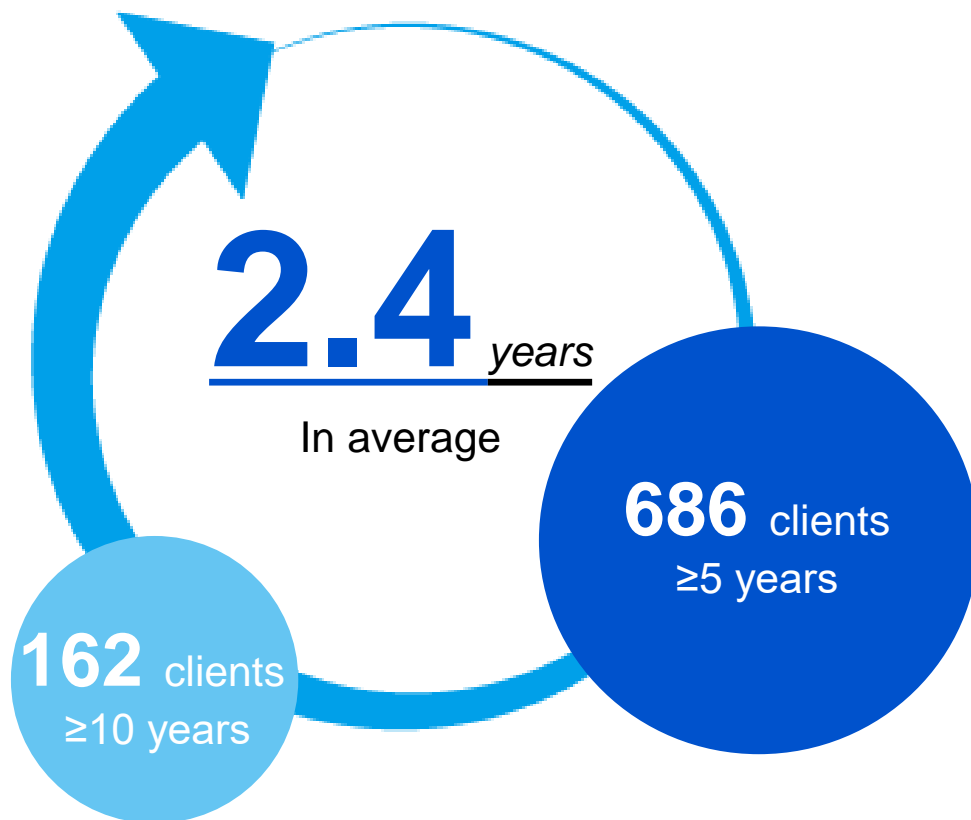


Singapore

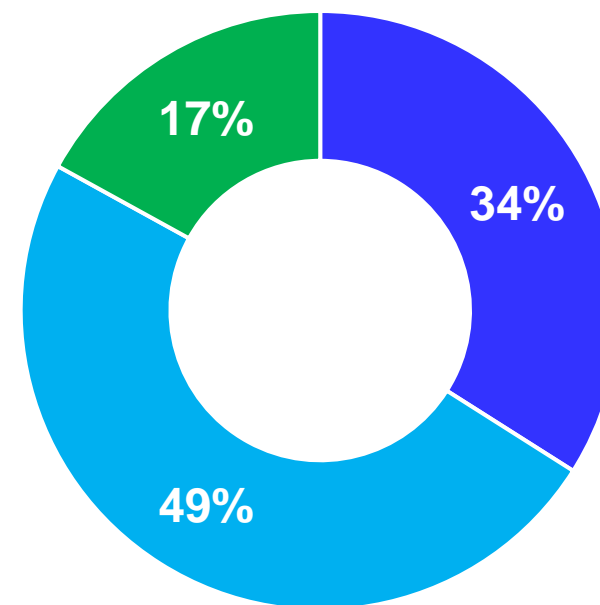
Reliable R&D Network **7** sites | Around **10,000** chemists



Excellence in Collaboration



Client Number Distribution



■ Clients < 5 FTEs ■ 5 FTEs ≤ Clients < 30 FTEs ■ Clients ≥ 30 FTEs

FTE Numbers in 2023



Specialty Chemistry

Targeted Covalent Inhibitor
Targeted Protein Degradator
Lipid Chemistry
Fluorine Chemistry
Carbohydrate
Nucleoside
Macrocyclic
Boron
Stable Isotope Labeling
Bioorthogonal Chemistry
Fluorescent Bio-probe and Labeling



Technology Platform

Flow Chemistry
Photoredox Chemistry
Electrochemistry
Enzyme Chemistry
Reaction Conditions Screening
Automated Robotic Synthesizer
Parallel Medicinal Chemistry (PMC)
Core Analytical Services (CAS)
Chemistry and Technology Department (CTD)



Integrated Discovery

Chemicals Support
Library
MedChem Design
Virtual Space
Custom Synthesis
Discovery Process Chemistry (DPC)
Kilo Lab & Process Safety Assessment
Computer-Aided Drug Design
Compound Management
Quantum Mechanics for Organic Synthesis
Drug Screening and Proteomics

Chemicals Requirement

1,800,000+ require/year

All Chemicals

880,000+ require/year

Hot BBs (10+ requires / year)

Chemicals In Stock (available in 4 hrs)

82% 1,400,000+ require/year

All Chemicals

95% 840,000+ require/year

Hot BBs (10+ requires / year)



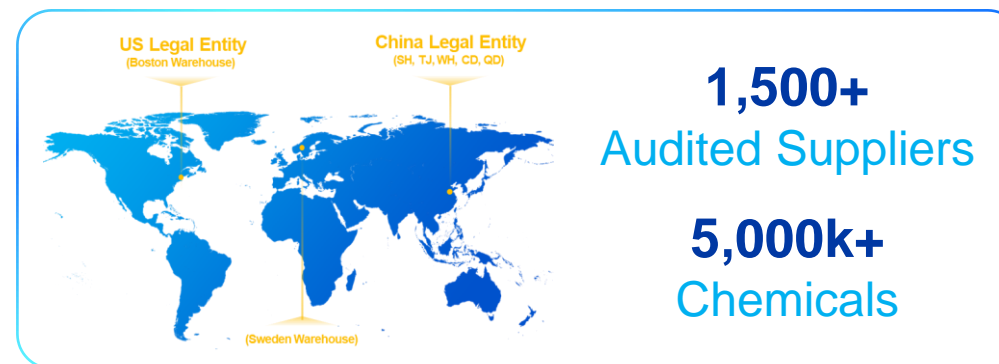
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Local Warehouses

90k+

Chemicals in stock

Warehouse



LabNetwork

Productivity

- Deliver compound numbers above client's expectation.
- Deliver compound quantity and purity above client's specifications.

Speed

- Deliver compounds within expected timelines.
- Communicate progress and results in a timely manner.

Flexibility

- Multiple service choices/packages available.

Quality

- Deliver high quality synthetic innovation.
- Implement new technologies and processes.

FTE



- **Deep Experience**
- **Proven Track Record**
- **Dedicated Team**

FFS



- **Fast delivery**
- **Flexible service mode**
- **High On-Time Rate**

Reliability

- Same high quality and systems across teams, collaborations, and all sites.
- 99% On-time Delivery

Platform & Support

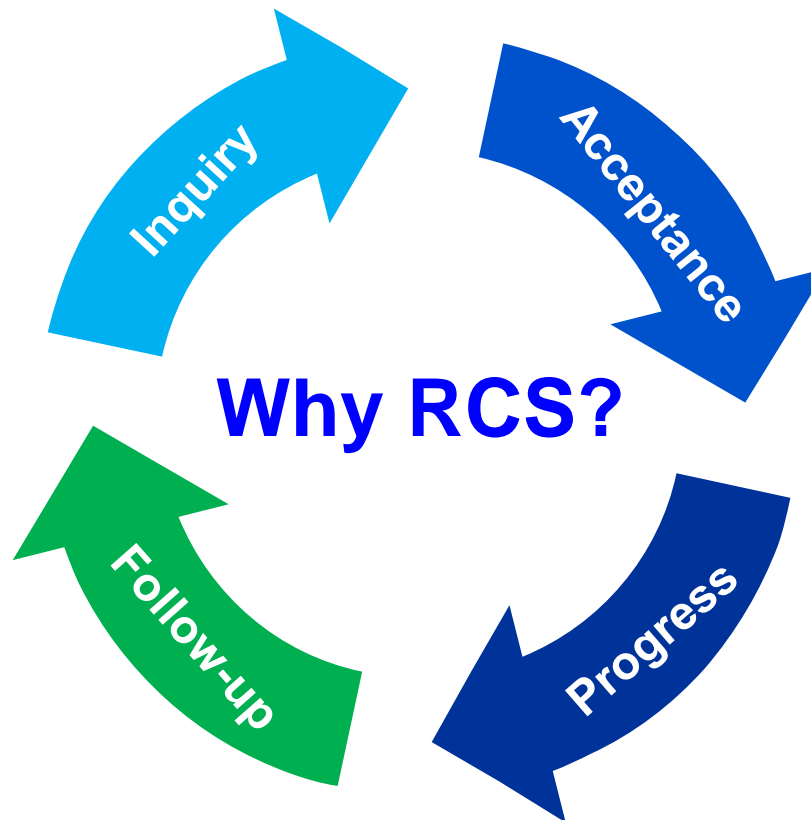


- Unmatched Capabilities
- Strong Analytical Team
- Diverse Reagent and Product
- Professional Management

- Request evaluation
- Assignment (PL + PM)
- Pre-Communication
- Starting material

- Target delivery
- Summary report
- Satisfaction
- New collaboration

PhD/Postdoc overseas



Chemistry expertise

- Kick-off meeting
- Research plan
- Work initiation
- Resource arrangement

- Timely reporting
- Trouble-shooting
- Process optimization
- Risk management

10+ years experience

Dedication

RCS is a global chemistry platform dedicated in efficient discovery of hits, leads and PCCs for pharma and biotech.

Expertise

Equipped with unmatched capabilities and capacity, RCS provides powerful solutions for drug research activities.

Excellence

Proven track record of RCS demonstrates the ability of delivering high quality results in a fast and reliable manner.

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