



PORTON

A CUSTOMER-CENTRIC, INNOVATIVE, AND RELIABLE CDMO WITH GLOBAL SOLUTIONS

OEB 1 to 5

Sub-g to Metric-ton Scale

Pre-clinical to Commercial

PORTON

Enabling the Public's
Early Access to Good Medicines



Small Molecules



Tides



Biologics & Conjugates

Linked in



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About Porton

With over 4700 employees, Porton Pharma Solutions, a global company with R&D and GMP-compliant manufacturing facilities across US, EU and China, provides customer-centric innovative and reliable CDMO solutions for Small Molecules, Tides, Biologics and Conjugates from pre-clinical to commercial.



2017-2024

Transformed into a Global Leading CDMO

Acquired J-STAR Research Inc. (USA), Xiaogan Plant (China), Fengxian (China) GMP Plant, and Building Slovenia GMP Plant (Europe)

2013-2015

Became a Public Company

1st USFDA Inspection Passed and Listed on Shenzhen Stock Exchange

2005-2008

Started CMO

Changshou (China) Site Started in 2006



5

Regulated Markets Approval



20+

Global Sites



4700+

Global Employees



1400+

R&D Chemists



2000+

Total Capacity (m³)



1000+

Global Customers



3000+

Milestone Projects



\$ 522 M

2023 Revenue

Global Presence

New Jersey 1
South Plainfield

R&D and GMP Manufacturing, DS

New Jersey 2
Cranbury

R&D and GMP Manufacturing, HP & DP

 **Menges, Slovenia**
R&D and GMP Manufacturing, DS

 **Copenhagen, Denmark**
Office

 **Turnhout, Belgium**
Office

 **Root, Switzerland**
Office

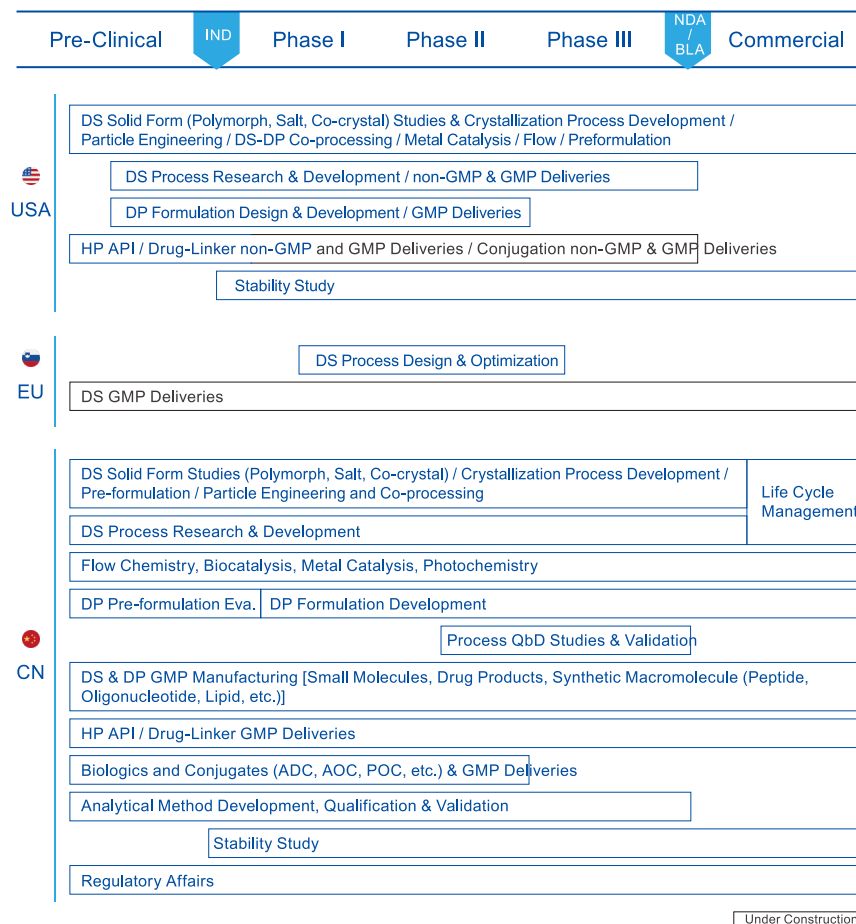
Chongqing
Headquarters
R&D and GMP Manufacturing
DS, DP

Xiaogan
Manufacturing, RSM

Shanghai
Headquarters
R&D and GMP Manufacturing
HP DS & DP
Biologics and Conjugates

Yichun
GMP Manufacturing, DS

Global Solutions with Capacity in USA, EU and China





Drug Substance Capacity

Site	Reactor Volume (m ³)	Reactor Volume Range (L)	Number of Reactors	Temperature Range (°C)	Reaction Pressure (Mpa)
Shanghai 3 ^{GMP/HP} Fengxian	75.5	200 to 6,300	46	-80 to 200	-0.1 to 5
Chongqing 2 ^{GMP} Changshou	834.3	5 to 10,000	323	-80 to 200	-0.1 to 5
Jiangxi ^{GMP} Yichun	519	200 to 5,000	197	-70 to 140	-0.1 to 1.6
Hubei ^{non-GMP} Xiaogan	565	1,000 to 6,300	118	-100 to 150	-0.1 to 0.6
^{GMP/HP} New Jersey 1&2	1	5 to 100	18	-80 to 200	-0.1 to 0.095
Total	1,994.8	5 to 10,000	702	-100 to 200	-0.1 to 5

Drug Product Capability and Capacity

New Jersey 2 - Cranbury

Solubility Enhancement	Dosage Form Development	GMP Clinical Phase I & II Production
<ul style="list-style-type: none"> • Particle Engineering • Co-processing 	<ul style="list-style-type: none"> • OSD • Liquid & Lyo Powder 	<ul style="list-style-type: none"> • OSD • Non-sterile Liquid

Chongqing 3 - Beibei

Tablet	Capsule	Injectable	Semisolid
<ul style="list-style-type: none"> • IR • MR • Double-layer Tablet 	<ul style="list-style-type: none"> • IR • MR • Micro-pellet Filler 	<ul style="list-style-type: none"> • Ampoule • Vials for Powder & Liquid 	<ul style="list-style-type: none"> • Cream • Ointment • Gel Paste • Gel Patch
<ul style="list-style-type: none"> • 1 B doses • 60 M doses (HP) 	<ul style="list-style-type: none"> • 200 M doses • 60 M doses (HP) 	<ul style="list-style-type: none"> • 55+ M units 	<ul style="list-style-type: none"> • 50+ M tubes

(Maximum Annual Output Capacity)



Process Design, Route Scouting, Development and Optimization for APIs and Intermediates



non-GMP and GMP Manufacturing from Pre-clinical to Commercial for APIs and Intermediates



Pre-formulation Research and Process Development & Optimization



Pre-clinical to Commercial Batches GMP Manufacturing for Drug Product



Comprehensive Analytical R&D and Quality Control



IND/NDA Dossier and CMC Solutions



Peptides

- Linear Peptides (<50 aa)
- Cyclic Peptides (<50 aa)
- Peptide Modification
- Key RSMs and Intermediates



Oligonucleotides

- ASO, siRNA
- miRNA
- Aptamer
- sgRNA
- Oligo Modifications



Drug Delivery Materials

- Ionizable Lipids / Cationic Lipids
- Polymers for Drug Delivery
- Complex/Conjugate Polysaccharides
- Other Lipids



Conjugates

- ADC
- AOC
- PDC



Targeting-vehicle

- Antibody
- Peptide
- Small Molecule



Payload

- Cytotoxic Drugs
- Oligonucleotides
- Radionuclide
- Fluorescers



Linker

- Cys (-SH): S-S, Maleimide Group (mc, mcc, etc.)
- Lys (-NH2): Activated Acid (CO-OSu, etc.)
- Short Peptide (VC, GFGG, etc.)



Early Stage Development Services



Process Development and DS Manufacturing



Formulation Development and DP Manufacturing



Analytical Development and QC



Registration Services



Early Stage Development Services



Process Development and DS Manufacturing



Formulation Development and DP Manufacturing



Analytical Development and QC



Registration Services



Enabling Chemical Technologies

◆ Particle Engineering

- Controlled Particle Formation
 - Crystallization
 - Precipitation (amorphous)
 - DS-DP Co-processing (composite)
- Controlled Post Processing
 - Filtration, Drying, Milling, etc.

🔗 Material Science & Engineering

- Solid Form Screen/Selection/Studies
- Characterizations of DS, Excipient, SD-DP Intermediate and DP
- Pre-formulation Evaluation

🧪 Process Engineering

- Process Simulation
- Continuous Processing & Process Control
- Reactor and Equipment Selection/Design
- Scale-up / Production De-risking
- Column & Membrane & Other Separations

🧴 Reaction Engineering

- Reaction Kinetics, Mechanism/Pathway, Selectivity
- Reaction Thermodynamics
- Reaction Simulation
- Reaction EHS (safety, e-factor, etc.)

📁 Computational Chemistry & Data Science

- Molecular & Thermodynamic Simulations
- ML-based DoE, Statistical DoE
- Other Computation Methodologies



Operational Excellence

📁 Intellectual Property (IP)

- Audited by 8 of Global Top 20 Pharma (100% Success Rate)
- ISO27001 Information Security Certification

🌟 Quality System

- One Portion One Quality System Strictly Following ICH Guidelines
- 5 Authorities GMP Inspections
- 800+ GMP Audits of Customer
- GMP Audits by 17 of Top 20 Global Pharma (100% Success Rate)



🌿 Environmental Health & Safety (EHS)

- 180+ EHS Audits and Inspections
- 10+ Global Top 20 Pharma EHS Audits

📁 Regulatory Affairs

- 8 APIs Passed PAI and Approved
- 60+ APIs of Successful PPQ
- 15+ On-going NDA Projects

🌿 Supply Chain

- Supply Chain Visibility
- Back Integration
- Local for Local Supply

📁 Project Management

- Customer-centric
- Lifecycle Management
- Efficient and Transparent Communication