

# Process Chemistry Services

**W**uXi AppTec is a leading global pharmaceutical, biopharmaceutical, and medical device outsourcing company with operations in China and the United States. Shanghai Syn-The-All Pharmaceutical Co. Ltd. ("STA") is a wholly owned subsidiary of WuXi AppTec which provides "end-to-end" API development and manufacturing services including chemical synthesis route selection, process optimization, scale-up process research and is capable of producing intermediates and APIs from gram to metric ton scale.

WuXi AppTec is a global leader in providing discovery, testing and manufacturing services for the pharmaceutical, biotechnology and medical device industries. Research-driven and customer-focused, with operations in China and the U.S., WuXi AppTec offers a broad and integrated portfolio of services designed to assist our customers with cost-effective and efficient outsourcing solutions.

**WX**  
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**NYSE**

## Services

- **Early-Stage Development**  
"Fit for purpose" synthetic route and process development
- **Late-Stage Process Development**  
Commercial route development  
Commercial process optimization to remove bottlenecks; increase yield and robustness, resulting in better economics  
Process validation
- **Process Analytical Science**  
Analytical method development and validation  
Characterization, in-process control and release testing  
Impurity structure elucidation  
ICH stability studies
- **Process Engineering**  
Crystallization process development  
Solid state characterization  
Process scale up  
Particle size control
- **Process Safety Evaluation**

## Our Strengths

- Integrated service offers turn-key solutions
- World class R&D team consisting of over 300 experienced process chemists
- State of art R&D facility including 26 process chemistry labs and 3 kilo labs
- Plant simulation equipment such as Jacketed Reaction Systems; jacket flasks, overhead stirrers, temperature control circulators
- Wide range of chemistry expertise including specialized technologies in:
  - Catalysts screening
  - Flow chemistry and continuous processes
  - Biotransformation
- Seamless transition from development to manufacturing
- Experienced project management and dedicated customer service teams



**For more information on WuXi AppTec's services please contact:**

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