



Custom APIs made  
with intelligent  
collaboration

Wait. What? Pfizer can help us scale-up for a global, commercial launch?

We sure can. Collaborate with Pfizer CentreOne. And access Pfizer's strong track record of taking products successfully to market.



### Listening. Solving. Guiding.

Welcome to Pfizer CentreOne. We're a global CDMO embedded within Pfizer specializing in small molecule API synthesis.

We can perform almost any kind of chemistry you need.

Working together with our customers, we combine our knowledge with open dialogue to solve challenges.

### Intelligent collaboration with Pfizer CentreOne.

Our custom API sites have been manufacturing Pfizer's broad array of innovation small molecules for decades. As your CDMO, we harness that experience – and look forward to collaborating with you.

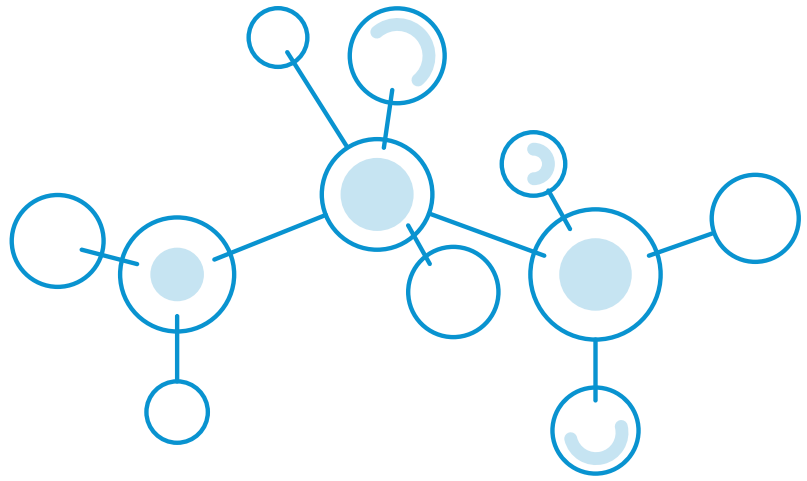
#### Our capabilities include:

- Complex organic synthesis
- Fermentation and bioprocessing up to 150,000-liter scale
- Milling and micronizing
- Process optimization and scale-up

You can rely on us for high-quality API synthesis, from process development through long-term supply.

### Capabilities at a glance:

<b>Compound types</b>	Most small molecules excluding cytotoxics, penicillins and betalactams
<b>Batch sizes</b>	From 100 grams to 3+ metric tons
<b>Analytical development</b>	<ul style="list-style-type: none"><li>• cGMP-compliant laboratories</li><li>• Full suite of analytical tools</li><li>• Method development services</li><li>• Structure elucidation</li></ul>
<b>Process development</b>	<ul style="list-style-type: none"><li>• Route selection</li><li>• Process optimization, including:<ul style="list-style-type: none"><li>– Telescoping</li><li>– Reaction monitoring through PAT</li></ul></li><li>• Process throughput</li><li>• Cleaning method development, validation and recovery studies</li><li>• Pilot/scale-up</li></ul>
<b>Other services</b>	<ul style="list-style-type: none"><li>• Stability</li><li>• Raw material sourcing</li><li>• Cleaning validation</li><li>• API CMC support</li><li>• Process safety management</li></ul>



## Capabilities in detail:

<b>Organic synthesis</b>	Hydrogenation	<b>Fermentation and bioprocessing</b>	Microbial/small molecule fermentation
	Acetylene chemistry		Algae, E coli, yeast fermentation
	Cyanide		Biotransformations
	Hydrofluoric acid		Enzymatic conversions
	Hydride		Centrifugation
	Cryogenic processing		Decanting centrifugation
	Gaseous HCl		Resin adsorption
	Organometallic (Grignard/organometallic)		Nanofiltration
	DIBAL reductions		Pilot-scale capabilities
	Chlorine		Culture/process development
	Chromatography		
	Chlorinated solvents		
	Ozone		
<b>Particle sizing</b>	Sieving	<b>Containment and segregation</b>	Potent
	Air classifier milling		OEL: < 1 µg/m <sup>3</sup> (0.5-60 kg)
	Comil (low-energy deagglomeration)		OEL: 1- 10 µg/m <sup>3</sup>
	Hammer mill		Controlled substance CII, CIII
	Sturtevant micronizer		Steroids and hormones
	Jetpharma micronizer		Prostaglandins
		<b>Regulatory overview cGMP inspections</b>	ANVISA, EMA, China FDA, FDA, Health Canada, MHRA, PMDA, Korean FDA, TGA

# Let's collaborate

Visit us at [www.pfizercentreone.com](http://www.pfizercentreone.com)



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