Intelligent collaboration with Pfizer CentreOne
Listen, solving, guiding.
Welcome to Pfizer CentreOne. We’re a global CDMO embedded within Pfizer and a leading supplier of specialty APIs. Working with our customers, we combine our technical and commercial knowledge with open dialogue to solve challenges – we call this intelligent collaboration.

More collaboration, better solutions.
Our approach means more efficient routes to market and high-quality APIs and drug products. Backed by Pfizer resources, we deliver technical and quality expertise, global regulatory support and long-term supply. We help guide your drugs securely and efficiently from development to commercial manufacture. We understand how important it is to get your medicine to the patients who need it and we will collaborate with you to deliver the breakthroughs that change patients’ lives.

We offer CDMO services focused on:
- Small molecule APIs
- Large molecule biologics
- Oral solids
- Sterile injectables

We sell APIs and intermediates manufactured in the U.S. under Pfizer quality standards:
- Steroids
- Hormones
- Antibiotics
- Prostaglandins

Our development and commercial offerings
Our global manufacturing network includes 35+ sites:

Our capabilities at a glance:

- Clinical manufacturing
- Development of cell cultures and lab-based fermentation processes
- API synthesis
- Specialized lyophilization development and optimization technology
- Manufacturing process optimization
- Safety screening and hazard evaluations
- Chemical and analytical development
- Scale-up from pilot to commercial
- Plant scale fermentation development
- Regulatory support – pre and post-launch

Development Services

Our global network delivers end-to-end analytical and manufacturing expertise. We will partner with you to take your molecule from early clinical phases through commercial manufacture and lifecycle management.

We offer full process development and optimization, including formulation, manufacturing, analytical testing, validation and method development.

We leverage our development and tech transfer expertise to help bring your product to market as quickly as possible.
## Regulatory Affairs Services

- Dedicated regulatory resources protect your confidentiality
- Access to Pfizer’s global regulatory expertise and support
- Proactive approach to early engagement with regulators
- Knowledge of the regulatory impact of manufacturing changes in a given market
- Flexible options that provide customized submission support

### Development

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<td>• Clinical trial application author &amp; support</td>
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<th>Quality/supply agreement input and review</th>
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### Commercial

- Authoring/review of the initial submission
- Review Agency meetings
- Serve as liaison with site CMC and QA
- Support for deficiency responses
- Labeling development for drug products
- Support for launch

### Lifecycle Management

- Post approval submission:
  - Strategy development
  - Documentation
  - Authoring/review
- Annual reports:
  - Due date tracking
  - Maintenance
  - Compilation
- International registration support
- Review and assessment of change controls
- Management of associated DMFs

## Simplifying the Customer Journey

**A dedicated commercial lead:**

- Ensures cross-functional support from start to finish
- Creates effective lines of communication and coordination
- Integrates information to improve decision making
- Works with core team members to build strong relationships with customer counterparts fostering team accountability, ownership, and partnership
- Provides formal program management which guarantees continuity throughout the commercial manufacture process
Pfizer’s global network allows access to commercial expertise in:

**Small Molecule APIs**
- Cryogenic chemistry (to -90°C), hydrogenation, chromatography, enzymatically catalyzed reactions, halogenations, milling, micronization, fermentation, biotransformations, complex multi-step synthesis

**Oral Solids**
- Tablets, capsules, semi-solids, wet/dry granulation, blending, coating, extrusion, compression, printing, high containment and hormone manufacture

**Large Molecule Biologics**
- Microbial fermentation, mammalian cell culture, viral cell culture, vaccines & antibody drug conjugation, cytotoxin production, purification, gene therapy and pegylation

**Sterile Injectables**
- Aseptic and terminally sterilized filling of liquids, powder and suspensions, lyophilization, vials, ampoules, pre-filled syringes, IV bags/bottles, auto-injectors and surgical hemostatic devices

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**Investment Strategy**

We are experiencing an exciting era in drug discovery and development with scientific advances promising future breakthroughs. To make this promise a reality, our manufacturing capabilities must keep pace and look ahead.

Pfizer invests more than $1B a year on our network of manufacturing sites, including state-of-the-art technologies, equipment and facilities.

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**Quality and Regulatory Expertise Across Pfizer’s Global Network**

**Proven quality system**
We assure quality for our customers’ products through our proven enterprise-wide Pfizer Quality System approach and our decades of successful development expertise. Most Pfizer CentreOne staff have more than 15 years of experience managing customer programs across a wide range of biologics, complex small molecules and sophisticated dose forms.

**Continuous improvement**
Pfizer continually invests in its process technologies, analytical capabilities and manufacturing operations to sustain quality and reveal process efficiencies and economies.

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**Collaboration**

Well-synchronized collaboration assures quality. Our dedicated method transfer teams deeply understand FDA and ICH validation guidelines, and work together with our customers to orchestrate smooth, compliant transfers into our sites. Our analytical chemists then collaborate to develop and trouble-shoot process methodology.

**Right first-time processes**
Focused on efficiency, our quality teams perform in-process testing and/or release with an emphasis on getting it right the first-time so programs can avoid issues that may trigger investigations, delays or batch failures.

**Regulatory understanding**
Managing regulatory filings and submissions for Chemistry, Manufacturing and Controls (CMC) for complex APIs requires extensive knowledge of the global regulatory landscape. This is especially true in early development stages when proactive regulatory engagement can minimize risks and potentially avoid delays.

We are well versed in global regulatory requirements and can help navigate customers’ products through launch, wherever their drug strategies take them.
Let’s collaborate

Visit us at www.pfizercentreone.com