



CGMP Drug Substance Manufacturing

Clinical & Commercial Scale 2L-2000L Bioreactors

- Single-Use Platform
- Microbial
- Cell Culture (mammalian, avian, insect)
- Virus
- Cell banking

Downstream Processing

- Single-Use Systems
- Aseptic Processing
- Depth Filtration
- Chromatography
- Ultrafiltration/Diafiltration
- Drug Substance Formulation
- Technology Transfer Plans (and Reports)
- Process Optimization and Scale-up
- Process Validation

Analytical

- Method Transfer
- Method Qualification and/or Validation
- Product In-process and Release Testing
- Stability Testing
- Raw Material Testing

Platform Technologies

- Two Proprietary Platform Technologies:
 - MVAtor™
 (modified vaccinia virus Ankara vector)
 - ADAPTIR™
 (Mono and Multi-Specific Protein Therapeutic)
- Expression Systems Development
- Cell Line & Medium Optimization
- Assay Development

CGMP Drug Product Manufacturing

Sterile Fill/Finish Liquid or Lyophilized Products Prefilled Syringes (0.5cc - 20cc)

- 3cc 125cc (2 filling lines)
- 2cc 50cc (1 filling line)

Production Lyophilizers

 $-216 \, ft^2$

Vial Sizes

- 240 ft²

Lyophilization Cycle Development

- Optimization of CriticalCycle Parameters
- Material Characterization
- FDM/FTIR/DSC
- Supporting Stability

Laboratory Services

- Microbiology
- Method Development/Validation
- ICH Stability

Process Development & Validation Labeling, Inspection & Packaging Distribution

Experience with Complex Formulation Types

- Proteins
- Plasmid DNA
- Liposomes
- Monoclonal Antibodies

Strong Regulatory History

- 20+ commercial products (products distributed in 50 countries)
- 200 Clinical Candidates Supported
- e-CTD Filing
- Expertise with Government Contracts

PRECLINICAL TOX & CMC
DEVELOPMENT SUPPORT PHASE I PHASE II PHASE III COMMERCIA



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To learn more about Emergent's Contract Manufacturing Services contact us at info contractmanufacturing@ebsi.com or 800-441-4225





Emergent BioSolutions is Dedicated To One Simple Mission:
To Protect & Enhance Life

