

# **Peptide Synthesis Service Market by Scale of Operation (Preclinical / Clinical and Commercial), Type of Synthesis Method Used (Chemical Synthesis Method and Non-Chemical Synthesis Method), Company Size (Small, Mid-sized and Large), and Key Geographical Regions (North America, Europe, Asia Pacific and Rest of the World): Industry Trends and Global Forecasts, 2022-2035**

<https://marketpublishers.com/r/P7D0007DD115EN.html>

Date: September 2023

Pages: 294

Price: US\$ 4,799.00 (Single User License)

ID: P7D0007DD115EN

## **Abstracts**

The global peptide synthesis service market is expected to reach USD 1.7 billion in 2022 anticipated to grow at a CAGR of 13.6% during the forecast period 2022-2035.

The increasing prominence of biologics has spurred a notable pivot among pharmaceutical enterprises towards more sophisticated interventions such as peptide therapeutics. Since the discovery of insulin, the market for peptide-based drugs has flourished, encompassing over 80 medications that target a spectrum of ailments including cancer, diabetes, and HIV. Since 2017, the FDA has approved over 10 peptide drugs, including Lupkynis<sup>TM</sup> and Zegalogue<sup>®</sup> in 2021, and Imcivree<sup>TM</sup>, Victoza<sup>®</sup>, and LUPRON DEPOT<sup>®</sup> in 2020. A vast array of clinical trials, exceeding 1,000, is currently investigating the therapeutic potential of novel peptides.

The surging demand for these drugs emanates from their specificity, minimal drug interactions, diverse biological actions, prolonged half-lives, established pharmacological efficacy, and safety profiles. However, the synthesis and purification of peptides present challenges that impact both yield and purity. To counter this, numerous entities involved in peptide synthesis opt to engage contract manufacturers.

Presently, more than 60 Contract Manufacturing Organizations (CMOs) and Contract Development and Manufacturing Organizations (CDMOs) offer services encompassing peptide development, manufacturing, and purification, consolidating themselves as comprehensive solutions for developers.

With continuous technological innovations, advancements in purification techniques, and an expanding pipeline, the peptide market is anticipated to undergo sustained growth. As pharmaceutical companies resume full operational capacities post-COVID-19, there is a projected uptick in demand for large-scale manufacturing of peptide therapeutics. Notably, the development of peptide-based COVID-19 vaccines will further amplify the need for manufacturing service providers to scale up production post-approval, addressing global demands.

## Report Coverage

The key insights from our research on the peptide contract manufacturing market, offering a high-level overview of its current status and expected evolution in the short, mid, and long term

Introduction to peptides, discussing different classes, synthesis methods, modifications, purification strategies, applications, and the rationale behind outsourcing peptide manufacturing operations.

Detailed insights into the regulatory landscape of peptide contract manufacturers across various regions like the US, Europe, Australia, China, India, Japan, and South Korea, including challenges faced due to regulatory scrutiny.

An overview of companies providing peptide contract manufacturing services, highlighting parameters such as establishment year, company size, geographical locations, synthesis methods, purification techniques, and regulatory certifications.

An analysis of prominent peptide contract manufacturers' competitiveness based on service strength, manufacturing capabilities, facility numbers, synthesis, purification methods, and peptide modification

Detailed profiles of key players in the peptide contract manufacturing domain, featuring company overviews, establishment years, employee count, headquarters, services offered, recent developments, and future outlooks.

An analysis of recent developments in the peptide contract manufacturing industry, including partnerships, collaborations, and facility expansions between 2016 and 2021.

In-depth analysis of completed, ongoing, and planned clinical studies on peptide therapeutics, focusing on trial parameters, industry players, study focus, and geographical regions.

Analysis of peptide contract manufacturing service providers' capabilities across different regions based on various parameters like CMO numbers, clinical sites, trials, patients enrolled, product types, and demand.

An analysis of the commercial and clinical demand for peptide therapeutics based on patient population, dosing frequency, and strength.

Analysis of the overall peptide manufacturing capacity across different-sized companies, operational scales (clinical vs. commercial), and geographical regions.

Potential strategic partners identified for collaboration with peptide therapeutics developers based on pipeline strength, maturity, establishment year, and company size.

Qualitative analysis outlining factors for peptide drug developers to consider while deciding between in-house manufacturing or engaging a CMO's services.

Detailed analysis of the total cost of ownership for a peptide contract manufacturing service provider over ten years, considering direct and indirect expenses.

Market forecast analysis projecting the peptide contract manufacturing market's growth till 2035, segmented by operational scale, synthesis methods, company size, and geographical regions.

Insightful discussion on how the COVID-19 pandemic might impact the peptide contract manufacturing market and initiatives taken by service providers to address pandemic-induced challenges.

In-depth discussion on industry trends, drivers, challenges, and SWOT analysis, evaluating their impact on the evolution of the peptide contract manufacturing field.

A summary of the entire report, presenting key takeaways, independent opinions on the peptide CMO market, upcoming trends influencing market growth, and insights from the research and analysis.

Insights from a comprehensive survey involving multiple stakeholders in the peptide therapeutics contract manufacturing market.

### Key Market Companies

AmbioPharm

CPC Scientific

Creative Peptides

CSBio

Bachem

BCN Peptide

Corden Pharma

PolyPeptide

Senn Chemicals

Auspep

Chinese Peptide

Hybio Pharmaceutical

Peptide Institute

ScinoPharm

## Contents

### 1. PREFACE

- 1.1. Scope of the Report
- 1.2. Research Methodology
- 1.3. Key Questions Answered
- 1.4. Chapter Outlines

### 2. EXECUTIVE SUMMARY

- 2.1. Chapter Overview

### 3. INTRODUCTION

- 3.1. Chapter Overview
- 3.2. Overview of Peptides
  - 3.2.1. Structural Analysis of Peptides
  - 3.2.2. Classification of Peptides
  - 3.2.3. Peptide Synthesis
  - 3.2.4. Type of Peptide Modification
    - 3.2.4.1. N-terminal Modification
    - 3.2.4.2. Internal Modification
    - 3.2.4.3. C-terminal Modification
    - 3.2.4.4. Other Modifications
  - 3.2.5. Peptide Purification
    - 3.2.5.1. Key Guidelines for Peptide Purity
- 3.3. Overview of Contract Manufacturing
  - 3.3.1. Need for Outsourcing Peptide Manufacturing Operations
  - 3.3.2. Key Considerations for Selecting a CMO Partner
  - 3.3.3. Advantages of Outsourcing Manufacturing Services
  - 3.3.4. Risks and Challenges Associated with Outsourcing Peptide Manufacturing Operations
- 3.4. Future Perspectives

### 4. REGULATORY LANDSCAPE

- 4.1. Chapter Overview
- 4.2. Regulatory Scenario: North America

- 4.2.1. The US Scenario
  - 4.2.1.1. Overview
  - 4.2.1.2. General Guidelines
- 4.3. Regulatory Scenario: Europe
  - 4.3.1. The European Scenario
    - 4.3.1.1. Overview
    - 4.3.1.2. General Guidelines
- 4.4. Regulatory Scenario: Asia Pacific
  - 4.4.1. Overview
  - 4.4.2. Australian Scenario
    - 4.4.2.1. General Guidelines
  - 4.4.3. Chinese Scenario
    - 4.4.3.1. General Guidelines
  - 4.4.4. Indian Scenario
    - 4.4.4.1. General Guidelines
  - 4.4.5. Japanese Scenario
    - 4.4.5.1. General Guidelines
  - 4.4.6. South Korean Scenario
    - 4.4.6.1. General Guidelines
- 4.5. Key Challenges Associated with Peptide Manufacturing

## **5. COMPETITIVE LANDSCAPE**

- 5.1 Chapter Overview
- 5.2 Contract Peptide API Manufacturers: Overall Market Landscape
  - 5.2.1. Analysis by Year of Establishment
  - 5.2.2. Analysis by Company Size
  - 5.2.3. Analysis by Location of Headquarters
  - 5.2.4. Analysis by Location of Manufacturing Facility (Continent-wise)
  - 5.2.5. Analysis by Location of Manufacturing Facility (Country-wise)
  - 5.2.6. Analysis by Type of Product
  - 5.2.7. Analysis by Type of Service(s) Offered
  - 5.2.8. Analysis by Scale of Operation
  - 5.2.9. Analysis by Type of Peptide Synthesis Method Used
  - 5.2.10. Analysis by Type of Peptide Modification Services Offered
  - 5.2.11. Analysis by Type of Purification Technology Used
  - 5.2.12. Analysis by Regulatory Accreditations / Certifications Received
- 5.3. List of Custom Peptide Manufacturers

## **6. COMPANY COMPETITIVENESS ANALYSIS**

6.1. Chapter Overview

6.2. Key Parameters

6.3. Methodology

6.4. Company Competitiveness Analysis: Peptide Therapeutics Contract API Manufacturers

6.4.1 Company Competitiveness: Small Companies

6.4.2 Company Competitiveness: Mid-sized Companies

6.4.3. Company Competitiveness: Large Companies

## **7. COMPANY PROFILES**

7.1 Chapter Overview

7.2. Contract Peptide API Manufacturers Based in North America

7.2.1. AmbioPharm

7.2.1.1. Company Overview

7.2.1.2. Service Portfolio

7.2.1.3. Manufacturing Facilities and Capabilities

7.2.1.4. Recent Development and Future Outlook

7.2.2. CPC Scientific

7.2.2.1. Company Overview

7.2.2.2. Service Portfolio

7.2.2.3. Manufacturing Facilities and Capabilities

7.2.2.4. Recent Developments and Future Outlook

7.2.3. Creative Peptides

7.2.3.1. Company Overview

7.2.3.2. Service Portfolio

7.2.3.3. Manufacturing Facilities and Capabilities

7.2.3.4. Recent Developments and Future Outlook

7.2.4. CSBio

7.2.4.1. Company Overview

7.2.4.2. Service Portfolio

7.2.4.3. Manufacturing Facilities and Capabilities

7.2.4.4. Recent Developments and Future Outlook

7.3. Contract Peptide API Manufacturers Based in Europe

7.3.1. Bachem

7.3.1.1. Recent Developments and Company Overview

7.3.1.2. Service Portfolio



- 7.3.1.3. Manufacturing Facilities and Capabilities
- 7.3.1.4. Recent Developments and Future Outlook
- 7.3.2. BCN Peptide
  - 7.3.2.1. Company Overview
  - 7.3.2.2. Service Portfolio
  - 7.3.2.3. Manufacturing Facilities and Capabilities
  - 7.3.2.4. Recent Developments and Future Outlook
- 7.3.3. Corden Pharma
  - 7.3.3.1. Company Overview
  - 7.3.3.2. Service Portfolio
  - 7.3.3.3. Manufacturing Facilities and Capabilities
  - 7.3.3.4. Recent Developments and Future Outlook
- 7.3.4. PolyPeptide
  - 7.3.4.1. Company Overview
  - 7.3.4.2. Service Portfolio
  - 7.3.4.3. Manufacturing Facilities and Capabilities
  - 7.3.4.4. Recent Developments and Future Outlook
- 7.3.5. Senn Chemicals
  - 7.3.5.1. Company Overview
  - 7.3.5.2. Service Portfolio
  - 7.3.5.3. Manufacturing Facilities and Capabilities
  - 7.3.5.4. Recent Developments and Future Outlook
- 7.4. Contract Peptide API Manufacturers Based in Asia Pacific
  - 7.4.1. Auspep
    - 7.4.1.1. Company Overview
    - 7.4.1.2. Service Portfolio
    - 7.4.1.3. Manufacturing Facilities and Capabilities
    - 7.4.1.4. Recent Developments and Future Outlook
  - 7.4.2. Chinese Peptide
    - 7.4.2.1. Company Overview
    - 7.4.2.2. Service Portfolio
    - 7.4.2.3. Manufacturing Facilities and Capabilities
    - 7.4.2.4. Recent Developments and Future Outlook
  - 7.4.3. Hybio Pharmaceutical
    - 7.4.3.1. Company Overview
    - 7.4.3.2. Service Portfolio
    - 7.4.3.3. Manufacturing Facilities and Capabilities
    - 7.4.3.4. Recent Developments and Future Outlook
  - 7.4.4. Peptide Institute

- 7.4.4.1. Company Overview
- 7.4.4.2. Service Portfolio
- 7.4.4.3. Manufacturing Facilities and Capabilities
- 7.4.4.4. Recent Developments and Future Outlook
- 7.4.5. ScinoPharm
  - 7.4.5.1. Company Overview
  - 7.4.5.2. Service Portfolio
  - 7.4.5.3. Manufacturing Facilities and Capabilities
  - 7.4.5.4. Recent Developments and Future Outlook

## **8. RECENT DEVELOPMENTS**

- 8.1. Chapter Overview
- 8.2. Partnerships Models
- 8.3. Peptide Therapeutics Contract API Manufacturers: List of Partnerships and Collaborations
  - 8.3.1. Analysis by Year of Partnership
  - 8.3.2. Analysis by Type of Partnership
  - 8.3.3. Analysis by Scale of Operation
  - 8.3.4. Analysis by Region (Continent-wise)
    - 8.3.4.1. Analysis by Region (Country-wise)
    - 8.3.4.2. Intercontinental and Intracontinental Distribution
- 8.4. Expansion Models
- 8.5. List of Recent Expansions
  - 8.5.1. Analysis by Year of Expansion
  - 8.5.2. Analysis by Type of Expansion
  - 8.5.3. Analysis by Location of Expansion (Continent-wise)
  - 8.5.4. Analysis by Location of Expansion (Country-wise)
- 8.6. Emerging Peptide Synthesis Technologies
  - 8.6.1. Chemo-Enzymatic Peptide Synthesis Technology
  - 8.6.2. Continuous Flow Technology
  - 8.6.3. Green Chemistry

## **9. CLINICAL TRIAL ANALYSIS**

- 9.1. Chapter Overview
- 9.2. Scope and Methodology
- 9.3. Peptide Therapeutics: List of Clinical Trials
  - 9.3.1. Analysis by Trial Status

- 9.3.2. Analysis by Trial Registration Year
- 9.3.3. Analysis by Type of Masking
- 9.3.4. Analysis by Type of Intervention Model
- 9.3.5. Analysis by Study Design
- 9.3.6. Analysis by Phase of Development
- 9.3.7. Analysis by Type of Sponsor
- 9.3.8. Most Active Players: Analysis by Number of Trials Registered
- 9.3.9. Analysis by Trial Registration Year and Trial Status
- 9.3.10. Analysis by Trial Registration Year and Geography
- 9.3.11. Analysis by Number of Trials, Trial Status and Geography
- 9.3.12. Analysis by Number of Trials, Trial Registration Year and Geography
- 9.4. Analysis of Enrolled Patient Population
  - 9.4.1. Analysis of Enrolled Patient Population by Geography
  - 9.4.2. Analysis by Number of Patients Enrolled, Trial Status and Geography
  - 9.4.3. Analysis by Phase of Development, Trial Registration Year and Number of Patients Enrolled
  - 9.4.4. Analysis of Number of Clinical Trials by Geography

## **10. REGIONAL CAPABILITY ANALYSIS**

- 10.1. Chapter Overview
- 10.2. Key Assumptions and Methodology
- 10.3. Overall Landscape of Contract Peptide API Manufacturers
- 10.4. Contract Peptide API Manufacturers in North America
- 10.5. Contract Peptide API Manufacturers in Europe
- 10.6. Contract Peptide API Manufacturing in Asia Pacific

## **11. DEMAND ANALYSIS**

- 11.1. Chapter Overview
- 11.2. Assumptions and Methodology
- 11.3. Peptide API Manufacturing: Overall Annual Demand
  - 11.3.1. Analysis by Geography

## **12. CAPACITY ANALYSIS**

- 12.1. Chapter Overview
- 12.2. Assumptions and Methodology
- 12.3. Peptide API Manufacturing: Installed Global Capacity

- 12.3.1. Analysis by Company Size
- 12.3.2. Analysis by Scale of Operation
- 12.3.3. Analysis by Location of Manufacturing Facility
- 12.3.4. Analysis by Company Size and Location of Manufacturing Facility
- 12.3.5. Analysis by Scape of Operation and Location of Manufacturing Facility
- 12.4. Concluding Remarks

## **13. LIKELY PARTNERS FOR PEPTIDE THERAPEUTICS CONTRACT API MANUFACTURING SERVICE PROVIDERS**

- 13.1. Chapter Overview
- 13.2. Scope and Methodology
- 13.3. Potential Strategic Partners for Peptide Contract Manufacturers

## **14. MAKE VERSUS BUY DECISION MAKING FRAMEWORK**

- 14.1. Chapter Overview
- 14.2. Assumptions and Parameter Definitions
  - 14.2.1. Scenario
  - 14.2.2. Scenario
  - 14.2.3. Scenario
  - 14.2.4. Scenario
- 14.3. Concluding Remarks

## **15. TOTAL COST OF OWNERSHIP IN PEPTIDE CONTRACT MANUFACTURING ORGANIZATION**

- 15.1. Chapter Overview
- 15.2. Expenditures Incurred by a Peptide Contract Manufacturing Organization
  - 15.2.1. Capital Expenditures (CAPEX)
  - 15.2.2. Operational Expenditures (OPEX)
- 15.3. Assumptions and Methodology
- 15.4. Total Cost of Ownership of Peptide Contract Manufacturing Organization, 2021-2030
- 15.5. Total Cost of Ownership of Peptide Contract Manufacturing Organization: Distribution by CAPEX and OPEX, 2021-2030
  - 15.5.1. Total Cost of Ownership of Peptide Contract Manufacturing Organization: Distribution by CAPEX, 2021-2030
  - 15.5.2. Total Cost of Ownership of Peptide Contract Manufacturing Organization:

Distribution by OPEX, 2021-2030

15.6. Concluding Remarks

## **16. MARKET SIZING AND OPPORTUNITY ANALYSIS**

16.1. Chapter Overview

16.2. Assumptions and Forecast Methodology

16.3. Overall Peptide Therapeutics Contract Manufacturing Market, 2022-2035

16.3.1. Peptide Therapeutics Contract API Manufacturing Market, 2022-2035

16.3.2. Peptide Therapeutics Contract FDF Manufacturing Market, 2022-2035

16.4. Peptide Therapeutics Contract API Manufacturing Market, 2022-2035: Distribution by Scale of Operation

16.5. Peptide Therapeutics Contract API Manufacturing Market, 2022-2035: Distribution by Type of Peptide Synthesis Method Used

16.5.1. Peptide Therapeutics Contract API Manufacturing Market, 2022-2035: Distribution by Type of Chemical Synthesis Method Used

16.6. Peptide Therapeutics Contract API Manufacturing Market, 2022-2035: Distribution by Company Size

16.7. Peptide Therapeutics Contract API Manufacturing Market, 2022-2035: Distribution by Key Geographical Regions

16.7.1. Peptide Therapeutics Contract API Manufacturing Market in North America, 2022-2035

16.7.1.1. Peptide Therapeutics Contract API Manufacturing Market in North America, 2022-2035: Share of Small Companies

16.7.1.2. Peptide Therapeutics Contract API Manufacturing Market in North America, 2022-2035: Share of Mid-sized Companies

16.7.1.3. Peptide Therapeutics Contract API Manufacturing Market in North America, 2022-2035: Share of Large Companies

16.7.1.4. Peptide Therapeutics Contract API Manufacturing Market in North America, 2022-2035: Share of Preclinical / Clinical Scale Operations

16.7.1.5. Peptide Therapeutics Contract API Manufacturing Market in North America, 2022-2035: Share of Commercial Scale Operations

16.7.1.6. Peptide Therapeutics Contract API Manufacturing Market in North America, 2022-2035: Share of Chemical Synthesis Methods

16.7.1.8. Peptide Therapeutics Contract API Manufacturing Market in North America, 2022-2035: Share of Non-Chemical Synthesis Methods

16.7.2. Peptide Therapeutics Contract API Manufacturing Market in Europe, 2022-2035

16.7.2.1. Peptide Therapeutics Contract API Manufacturing Market in Europe,

2022-2035: Share of Small Companies

16.7.2.2. Peptide Therapeutics Contract API Manufacturing Market in Europe,  
2022-2035: Share of Mid-sized Companies

16.7.2.3. Peptide Therapeutics Contract API Manufacturing Market in Europe,  
2022-2035: Share of Large Companies

16.7.2.4. Peptide Therapeutics Contract API Manufacturing Market in Europe,  
2022-2035: Share of Preclinical / Clinical Scale Operations

16.7.2.5. Peptide Therapeutics Contract API Manufacturing Market in Europe,  
2022-2035: Share of Commercial Scale Operations

16.7.2.6. Peptide Therapeutics Contract API Manufacturing Market in Europe,  
2022-2035: Share of Chemical Synthesis Methods

16.7.2.8. Peptide Therapeutics Contract API Manufacturing Market in Europe,  
2022-2035: Share of Non-Chemical Synthesis Methods

16.7.3. Peptide Therapeutics Contract API Manufacturing Market in Asia Pacific,  
2022-2035

16.7.3.1. Peptide Therapeutics Contract API Manufacturing Market in Asia Pacific,  
2022-2035: Share of Small Companies

16.7.3.2. Peptide Therapeutics Contract API Manufacturing Market in Asia Pacific,  
2022-2035: Share of Mid-sized Companies

16.7.3.3. Peptide Therapeutics Contract API Manufacturing Market in Asia Pacific,  
2022-2035: Share of Large Companies

16.7.3.4. Peptide Therapeutics Contract API Manufacturing Market in Asia Pacific,  
2022-2035: Share of Preclinical / Clinical Scale Operations

16.7.3.5. Peptide Therapeutics Contract API Manufacturing Market in Asia Pacific,  
2022-2035: Share of Commercial Scale Operations

16.7.3.6. Peptide Therapeutics Contract API Manufacturing Market in Asia Pacific,  
2022-2035: Share of Chemical Synthesis Methods

16.7.3.7. Peptide Therapeutics Contract API Manufacturing Market in Asia Pacific,  
2022-2035: Share of Non-Chemical Synthesis Methods

## **17. IMPACT OF THE COVID-19 PANDEMIC ON THE PEPTIDE API CONTRACT MANUFACTURING MARKET**

17.1. Chapter Overview

17.2. Current Options and Recuperative Initiatives of Key Players

17.2.1. Bachem

17.2.2. CPC Scientific

17.2.3. Corden Pharma

17.2.4. PolyPeptide

- 17.2.5. Wuxi AppTec
- 17.3. Impact on Peptide API Contract Manufacturing Market

## **18. SWOT ANALYSIS**

- 18.1. Chapter Overview
- 18.2. Strengths
- 18.3. Weaknesses
- 18.4. Opportunities
- 18.5. Threats
- 18.6. Comparison of SWOT Factors
- 18.7. Concluding Remark

## **19. CONCLUSION**

- 19.1. Chapter Overview

## **20. SURVEY TRANSCRIPT(S)**

## **21. APPENDIX 1: TABULATED DATA**

## **22. APPENDIX 2: LIST OF COMPANIES AND ORGANISATIONS**

## I would like to order

Product name: Peptide Synthesis Service Market by Scale of Operation (Preclinical / Clinical and Commercial), Type of Synthesis Method Used (Chemical Synthesis Method and Non-Chemical Synthesis Method), Company Size (Small, Mid-sized and Large), and Key Geographical Regions (North America, Europe, Asia Pacific and Rest of the World): Industry Trends and Global Forecasts, 2022-2035

Product link: <https://marketpublishers.com/r/P7D0007DD115EN.html>

Price: US\$ 4,799.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

[info@marketpublishers.com](mailto:info@marketpublishers.com)

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/P7D0007DD115EN.html>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:  
Last name:  
Email:  
Company:  
Address:  
City:  
Zip code:  
Country:  
Tel:  
Fax:  
Your message:

**\*\*All fields are required**

Customer signature \_\_\_\_\_

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <https://marketpublishers.com/docs/terms.html>



To place an order via fax simply print this form, fill in the information below  
and fax the completed form to +44 20 7900 3970