

# **ADC Technology Market: Focus on ADC Linker and ADC Conjugation Technologies (2nd Edition) - Distribution by Generation of ADC Technology, Type of Conjugation, Type of Linker and Key Geographical Regions: Industry Trends and Global Forecasts, 2023-2035**

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## **Abstracts**

The antibody drug conjugates technology market is anticipated to grow at a CAGR of 15% during the forecast period 2023-2035

Antibody drug conjugates (ADCs) have emerged as a promising avenue in cancer therapy, providing an alternative to conventional treatments. Currently, around 14 ADCs have received approval from the USFDA, and over 420 are undergoing evaluations in various developmental stages. This class of biotherapeutics relies on a complex structure involving linkers binding cytotoxic payloads to antibodies. However, the complexity of ADC design poses challenges in ensuring overall effectiveness and tolerance of the molecule. Consequently, there is a pressing need for more sophisticated and potent ADC technologies to facilitate controlled assembly while maintaining safety and tolerability. ADC technologies encompass the modification and engineering of antibodies for conjugation with payloads or linker-drug moieties. Simultaneously, ADC linker technologies focus on structurally developing moieties that reliably link payloads to antibodies, ensuring desired payload delivery mechanics. These approaches are tailored to produce homogeneous ADCs with a high drug to antibody ratio (DAR), exhibiting enhanced stability and efficacy within the tumor micro-environment.

Homogeneous ADCs, facilitated by optimized linker technologies, display reduced

immunogenicity, enabling targeted delivery of the linker-payload complex without adverse effects. Consequently, numerous startups and established entities have entered the domain, offering novel bioconjugation technologies, potent payloads, and advanced linker chemistries. Many of these players have engaged in licensing agreements to advance their ADC development initiatives. Notably, researchers and developers of ADCs actively seek expertise and experience from companies specializing in ADC linker and conjugation technologies. Driven by the escalating demand for ADCs, the market for ADC linker and conjugation technologies is projected to experience substantial growth in the forecast period.

## Report Coverage

The study examines the ADC technology market by analyzing ADC technology, conjugation type, linker type, and key geographical regions.

An analysis is conducted on the factors influencing market growth, including drivers, restraints, opportunities, and challenges.

Evaluation of potential advantages and barriers within the market is provided, along with insights into the competitive landscape for major market players.

Revenue forecasts for market segments are presented concerning four significant regions.

The executive summary encompasses essential insights gathered from extensive research, offering a comprehensive overview of the current landscape and future trajectory of the ADC linker and antibody conjugation technologies market. This includes an introduction to antibody drug conjugates (ADCs), emphasizing their components, mechanisms of action, and advantages over conventional therapies. The focus remains on the pivotal role played by ADC linker and conjugation technologies in ADC therapeutic development. The section provides an overview of various linker types, conjugation technologies, their specifications, and discusses challenges while presenting anticipated future trends.

A comprehensive review of the ADC linker and conjugation technologies landscape is presented based on various parameters, including technology types, licensing availability, generation categorization, site specificity, conjugation methods, drug antibody ratio, compatible linker types, conjugation

chemistry, and company profiles based on establishment year, size, and headquarters location.

An in-depth analysis categorizes technology players into small, mid-sized, and large groups, assessing their strengths based on portfolio depth, technological competitiveness, and partnership activities, allowing companies to compare capabilities within and beyond their peer groups and identify opportunities for competitive advantage.

Detailed profiles highlight prominent companies engaged in ADC linker and conjugation technologies, covering company overview, technology portfolio, recent developments, and future outlook.

A thorough review of patents filed/granted for ADC linker and conjugation technologies between 2018-2023 includes parameters such as patent types, publication, and application years, jurisdiction, focus areas, CPC symbols, and patent valuation analysis, emphasizing leading patents based on citations.

Analysis of partnerships formed between stakeholders for ADC technologies during 2014-2023 explores partnership types, partner categories, technological generations, therapeutic areas, active players, and geographical locations.

A detailed examination of business models adopted by ADC technology providers covers partnership purposes, business strategies, investment types, amounts, and active players.

An extensive analysis of over 85 ADC therapeutics developers likely to partner with ADC linker and conjugation technology companies evaluates based on establishment year, company size, portfolio, pipeline, and therapeutic area.

A brand positioning analysis of leading antibody conjugation technology providers highlights current perceptions of their proprietary technologies based on experience, technology diversity, patents, and partnerships.

A detailed case study investigates the ADC market, considering development stages, disease indications, therapeutic areas, treatment lines, dosing frequencies, antigen targets, developer details, and active players.

## Key Market Companies

Alteogen

Ambrx

Antikor

Catalent Biologics

Heidelberg Pharma

Iksuda Therapeutics

LegoChem Biosciences

Mersana Therapeutics

NBE-Therapeutics

Seattle Genetics

Sutro Biopharma

## Contents

### 1. PREFACE

- 1.1. Introduction
- 1.2. Key Market Insights
- 1.3. Scope of the Report
- 1.4. Research Methodology
- 1.5. Frequently Asked Questions
- 1.6. Chapter Outlines

### 2. EXECUTIVE SUMMARY

### 3. INTRODUCTION

- 3.1. Chapter Overview
- 3.2. Antibody Drug Conjugates (ADCs)
  - 3.2.1. Components of ADCs
    - 3.2.1.1. Antibody
    - 3.2.1.2. Cytotoxin
    - 3.2.1.3. Linker
- 3.3. Advantages of ADCs Over Conventional Therapeutics
- 3.4. ADC Linker Technologies
  - 3.4.1. Non-cleavable Linkers
  - 3.4.2. Cleavable Linkers
- 3.4. ADC Conjugation Technologies
  - 3.4.1. Chemical Conjugation
  - 3.4.2. Enzymatic Conjugation
- 3.5. Future Perspectives

### 4. ADC LINKER AND CONJUGATION TECHNOLOGIES: MARKET LANDSCAPE

- 4.1. Chapter Overview
- 4.2. ADC Linker and Conjugation Technologies: Overall Market Landscape
  - 4.2.1. Analysis by Type of Technology
  - 4.2.2. Analysis by Availability of Licensing
- 4.3. ADC Conjugation Technologies
  - 4.3.1. Analysis by Generation of Technology
  - 4.3.2. Analysis by Site Specificity

- 4.3.3. Analysis by Type of Conjugation
- 4.3.4. Analysis by Drug Antibody Ratio
- 4.3.5. Analysis by Compatible Linker
- 4.3.6. Analysis by Conjugation Chemistry
- 4.3.7. Analysis by Conjugation Site
- 4.4. ADC Linker and ADC Linker-Payload Technologies
  - 4.4.1. Analysis by Type of Linker
- 4.5. ADC Linker and Conjugation Technology Providers
  - 4.5.1. Analysis by Year of Establishment
  - 4.5.2. Analysis by Company Size
  - 4.5.3. Analysis by Location of Headquarters
  - 4.5.4. Analysis by Year of Establishment and Location of Headquarters
  - 4.5.5. Analysis by Company Size and Location of Headquarters
- 4.6. ADC Conjugation Technologies Service Providers

## **5. TECHNOLOGY COMPETITIVENESS ANALYSIS**

- 5.1 Chapter Overview
- 5.2 Assumptions and Key Parameters
- 5.3 Methodology
- 5.4 ADC Linker and Conjugation Technologies: Technology Competitiveness Analysis
  - 5.4.1 Technologies Offered by Small Companies
  - 5.4.2 Technologies Offered by Mid-sized Companies
  - 5.4.3 Technologies Offered by Large Companies

## **6. COMPANY PROFILES**

- 6.1. Chapter Overview
- 6.2. Companies Headquartered in North America
  - 6.2.1. Ambrx
    - 6.2.1.2. Company Overview
    - 6.2.1.3. Financial Information
    - 6.2.1.4. Technology Portfolio
    - 6.2.1.5. Recent Developments and Future outlook
  - 6.2.2. Catalent Biologics
    - 6.2.2.1. Company Overview
    - 6.2.2.2. Financial Information
    - 6.2.2.3. Technology Portfolio
    - 6.2.2.4. Recent Developments and Future outlook

- 6.2.3. Mersana Therapeutics
  - 6.2.3.1. Company Overview
  - 6.2.3.2. Financial Information
  - 6.2.3.3. Technology Portfolio
  - 6.2.3.4. Recent Developments and Future outlook
- 6.2.4. Seagen
  - 6.2.4.1. Company Overview
  - 6.2.4.2. Financial Information
  - 6.2.4.3. Technology Portfolio
  - 6.2.4.4. Recent Developments and Future outlook
- 6.2.5. Sutro Biopharma
  - 6.2.5.1. Company Overview
  - 6.2.5.2. Financial Information
  - 6.2.5.3. Technology Portfolio
  - 6.2.5.4. Recent Developments and Future outlook
- 6.3. Companies Headquartered in Europe
  - 6.3.1. Antikor Biopharma
    - 6.3.1.1. Company Overview
    - 6.3.1.2. Technology Portfolio
    - 6.3.1.3. Recent Developments and Future outlook
  - 6.3.2. Iksuda Therapeutics
    - 6.3.2.1. Company Overview
    - 6.3.2.2. Technology Portfolio
    - 6.3.2.3. Recent Developments and Future outlook
  - 6.3.3. Heidelberg Pharma
    - 6.3.3.1. Company Overview
    - 6.3.3.2. Financial Information
    - 6.3.3.3. Technology Portfolio
    - 6.3.3.4. Recent Developments and Future outlook
  - 6.3.4. LinXis Biopharmaceuticals
    - 6.3.4.1. Company Overview
    - 6.3.4.2. Technology Portfolio
    - 6.3.4.3. Recent Developments and Future outlook
  - 6.3.5. NBE-Therapeutics
    - 6.3.5.1. Company Overview
    - 6.3.5.2. Technology Portfolio
    - 6.3.5.3. Recent Developments and Future outlook
- 6.4. Companies Headquartered in Asia-Pacific and Rest of the World
  - 6.4.1. Alteogen

- 6.4.1.1. Company Overview
- 6.4.1.2. Technology Portfolio
- 6.4.1.3. Recent Developments and Future outlook
- 6.5.2. LegoChem Biosciences
  - 6.5.2.1. Company Overview
  - 6.5.2.2. Technology Portfolio
  - 6.5.2.3. Recent Developments and Future outlook

## **7. PATENT ANALYSIS**

- 7.1. Chapter Overview
- 7.2. Scope and Methodology
- 7.3. ADC Linker and Conjugation Technologies: Patent Analysis
  - 7.3.1. Analysis by Publication Year
  - 7.3.2. Analysis by Application Year
  - 7.3.3. Analysis by Annual Number of Granted Patents and Patent Applications
  - 7.3.4. Analysis by Patent Jurisdiction
  - 7.3.5. Analysis by CPC Symbols and Sections
  - 7.3.6. Analysis by Type of Applicant
  - 7.3.7. Leading Industry Players: Analysis by Number of Patents
  - 7.3.8. Leading Non-Industry Players: Analysis by Number of Patents
  - 7.3.9. Leading Patent Assignees: Analysis by Number of Patents
- 7.4. Patent Benchmarking Analysis
  - 7.4.1. Analysis by Patent Characteristics
- 7.5. Patent Valuation
- 7.6. Leading Patents by Number of Citations

## **8. PARTNERSHIPS AND COLLABORATIONS**

- 8.1. Chapter Overview
- 8.2. Partnership Models
- 8.3. ADC Linker and Conjugation Technologies: Partnerships and Collaborations
  - 8.3.1. Analysis by Year of Partnership
  - 8.3.2. Analysis by Type of Partnership
  - 8.3.3. Analysis by Year of Partnership and Type of Partnership
  - 8.3.4. Analysis by Type of Partnership and Generation of Technology
  - 8.3.5. Analysis by Type of Partnership and Type of Linker
  - 8.3.6. Analysis by Type of Partnership and Type of Conjugation
  - 8.3.7. Analysis by Type of Partner



- 8.3.8. Analysis by Year of Partnership and Type of Partner
- 8.3.9. Analysis by Type of Partnership and Type of Partner
- 8.3.10. Analysis by Target Therapeutic Area(s)
- 8.3.11. Most Active Players: Analysis by Number of Partnerships
- 8.3.12. Most Popular Technologies: Analysis by Number of Partnerships
- 8.4. Regional Analysis
  - 8.4.1. Local and International Agreements
  - 8.4.12. Intercontinental and Intracontinental Agreements

## **9. BUSINESS MODEL ANALYSIS**

- 9.1. Chapter Overview
- 9.2 Business Strategies
- 9.4. ADC Linker and Conjugation Technology Providers: Business Strategy Analysis
  - 9.4.1. Analysis by Purpose of Partnership
  - 9.4.2. Analysis by Year of Partnership and Purpose of Partnership
  - 9.4.3. Analysis by Type of Business Strategy Adopted
  - 9.4.4. Analysis by Purpose of Partnership and Type of Business Strategy Adopted
  - 9.4.5. Analysis by Upfront and Milestone Payments
  - 9.4.6. Analysis by Type of Business Strategy Adopted and Deal Value
- 9.5. Most Active Players: Analysis by Number of Partnerships
  - 9.5.1. Synaffix
    - 9.5.1.1. Analysis by Purpose of Partnership
    - 9.5.1.2. Analysis of Technology Out-Licensing Deals by Deal Value
  - 9.5.2. LegoChem Biosciences
    - 9.5.2.1. Analysis by Purpose of Partnership
    - 9.5.2.2. Analysis by Year of Partnership and Business Strategy Adopted
    - 9.5.2.3. Analysis of Technology Out-Licensing Deals by Amount of Investment
  - 9.5.3. Catalent Biologics
    - 9.5.3.1. Analysis by Purpose of Partnership
    - 9.5.3.2. Analysis by Year of Partnership and Business Strategy Adopted
  - 9.5.4. Sutro Biopharma
    - 9.5.4.1. Analysis by Purpose of Partnership
    - 9.5.4.2. Analysis by Year of Partnership and Business Strategy Adopted
    - 9.5.4.3. Analysis of Technology Out-Licensing Deals by Deal Value
  - 9.5.5. Heidelberg Pharma
    - 9.5.5.1. Analysis by Purpose of Partnership
    - 9.5.5.2. Analysis by Year of Partnership and Business Strategy Adopted
  - 9.5.6. Mersana Therapeutics

- 9.5.6.1. Analysis by Purpose of Partnership
- 9.5.6.2. Analysis by Year of Partnership and Business Strategy Adopted
- 9.7. Concluding Remarks

## **10. LIKELY PARTNERS ANALYSIS**

- 10.1. Chapter Overview
- 10.2. Assumptions / Key Parameters
- 10.3. Scope and Methodology
- 10.4. Potential Strategic Partners in North America
  - 10.4.1. Most Likely Partners
  - 10.4.2. Likely Partners
  - 10.4.3. Less Likely Partners
  - 10.4.4. Least Likely Partners
- 10.5. Potential Strategic Partners in Europe
  - 10.5.1. Most Likely Partners
  - 10.5.2. Likely Partners
  - 10.5.3. Less Likely Partners
  - 10.5.4. Least Likely Partners
- 10.6. Potential Strategic Partners in Asia-Pacific and Rest of the World
  - 10.6.1. Most Likely Partners
  - 10.6.2. Likely Partners
  - 10.6.3. Less Likely Partners
  - 10.6.4. Least Likely Partners

## **11. BRAND POSITIONING ANALYSIS**

- 11.1. Chapter Overview
- 11.2. Scope and Methodology
- 11.3. Key Parameters
- 11.4. Brand Positioning Matrix: ADC Conjugation Technology Providers
  - 11.4.1. Brand Positioning Matrix: Abzena
  - 11.4.2. Brand Positioning Matrix: Ambrx
  - 11.4.3. Brand Positioning Matrix: Byondis
  - 11.4.4. Brand Positioning Matrix: Creative Biolabs
  - 11.4.5. Brand Positioning Matrix: Eisai
  - 11.4.6. Brand Positioning Matrix: Mersana Therapeutics
  - 11.4.7. Brand Positioning Matrix: Sorrento Therapeutics
  - 11.4.8. Brand Positioning Matrix: Tubulis

## **12. ADC THERAPEUTICS: MARKET LANDSCAPE**

### 12.1. Chapter Overview

### 12.2. Antibody Drug Conjugates: Therapies Pipeline

#### 12.2.1. Analysis by Stage of Development

#### 12.2.2. Analysis by Target Disease Indication(s)

#### 12.2.3. Analysis by Therapeutic Area(s)

#### 12.2.4. Analysis by Line of Treatment

#### 12.2.5. Analysis by Dosing Frequency

#### 12.2.6. Analysis by Type of Therapy

#### 12.2.7. Analysis by Target Antigen

#### 12.2.8. Analysis by Antibody Isotype

#### 12.2.9. Analysis by Type of Payload / Cytotoxin / Warhead

#### 12.2.10. Analysis by Type of Payload

#### 12.2.11. Analysis by Linker

#### 12.2.12. Analysis by Type of Linker (Cleavable / Non-Cleavable)

### 12.3. Antibody Drug Conjugate: List of Developers

#### 12.3.1. Analysis by Year of Establishment

#### 12.3.2. Analysis by Company Size

#### 12.3.3. Analysis by Location of Headquarters

#### 12.3.4. Analysis by Company size and Location of Headquarters

#### 12.3.5. Most Active Players: Analysis by Number of Therapies

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

### 13.1. Chapter Overview

### 13.2. Key Assumptions

### 13.3. Forecast Methodology

### 13.4. Global ADC Linker and Conjugation Technologies Market, Historical, Base and Forecasted Scenario, 2017-2035

#### 13.4.1. ADC Linker and Conjugation Technologies Market: Distribution by Generation of Technology, 2023 and 2035

##### 13.4.1.1. ADC Linker and Conjugation Technologies Market for Third-Generation Technologies 2023-2035

##### 13.4.1.2. ADC Linker and Conjugation Technologies Market for Second-Generation Technologies 2023-2035

##### 13.4.1.3. ADC Linker and Conjugation Technologies Market for Next-Generation Technologies, 2023-2035

13.4.2. ADC Linker and Conjugation Technologies Market: Distribution by Type of Conjugation, 2023 and 2035

13.4.2.1. ADC Linker and Conjugation Technologies Market for Chemical Conjugation, 2023-2035

13.4.2.2. ADC Linker and Conjugation Technologies Market for Chemoenzymatic Conjugation, 2023-2035

13.4.2.3. ADC Linker and Conjugation Technologies Market for Enzymatic Conjugation, 2023-2035

13.4.3. ADC Linker and Conjugation Technologies Market: Distribution by Type of Linker, 2023 and 2035

13.4.3.1. ADC Linker and Conjugation Technologies Market for Cleavable Linkers, 2023-2035

13.4.3.2. ADC Linker and Conjugation Technologies Market for Non-Cleavable Linkers, 2023-2035

13.4.4. ADC Linker and Conjugation Technologies Market: Distribution by Type of Payment Model Adopted, 2023 and 2035

13.4.4.1. ADC Linker and Conjugation Technologies Market for Upfront Payments, 2023-2035

13.4.4.2. ADC Linker and Conjugation Technologies Market for Milestone Payments, 2023-2035

13.4.5. ADC Linker and Conjugation Technologies Market: Distribution by Key Geographical Regions, 2023 and 2035

13.4.5.1. ADC Linker and Conjugation Technologies Market in North America, 2023-2035

13.4.5.1.1. ADC Linker and Conjugation Technologies Market in North America: Distribution by Generation of Technology, 2023-2035

13.4.5.1.2. ADC Linker and Conjugation Technologies Market in North America: Distribution by Type of Conjugation, 2023-2035

13.4.5.1.3. ADC Linker and Conjugation Technologies Market in North America: Distribution by Type Linker, 2023-2035

13.4.5.2. ADC Linker and Conjugation Technologies Market in Europe, 2023-2035

13.4.5.2.1. ADC Linker and Conjugation Technologies Market in Europe: Distribution by Generation of Technology, 2023-2035

13.4.5.2.2. ADC Linker and Conjugation Technologies Market in Europe: Distribution by Type of Conjugation, 2023-2035

13.4.5.2.3. ADC Linker and Conjugation Technologies Market in Europe: Distribution by Type Linker, 2023-2035

13.4.5.3. ADC Linker and Conjugation Technologies Market in Asia-Pacific and Rest of the World, 2023-2035

13.4.5.3.1. ADC Linker and Conjugation Technologies Market in Asia-Pacific and Rest of the World: Distribution by Generation of Technology, 2023-2035

13.4.5.3.2. ADC Linker and Conjugation Technologies Market in Asia-Pacific and Rest of the World: Distribution by Type of Conjugation, 2023-2035

13.4.5.3.3. ADC Linker and Conjugation Technologies Market in Asia-Pacific and Rest of the World: Distribution by Type of Linker, 2023-2035

13.5. Concluding Remarks

## 14. EXECUTIVE INSIGHTS

14.1. Chapter Overview

14.2. Abzena

14.2.1. Company Snapshot

14.2.2. Interview Transcript: Saptarshi Ghosh (Scientist II)

14.3. MedLink Therapeutics

14.3.1. Company Snapshot

14.3.2. Interview Transcript: Jiaqiang Cai (Co-Founder and Chief Scientific Officer)

14.4. Merck KGaA

14.4.1. Company Snapshot

14.4.2. Interview Transcript: Kai Uhrig (Head of Strategy and Business Development)

14.5. Singzyme

14.5.1. Company Snapshot

14.5.2. Interview Transcript: Cedric Lizin (Board Member)

14.6. Ajinomoto

14.6.1. Company Snapshot

14.6.2. Interview Transcript: Okuzumi-Tatsuya (General Manager, Research and Development), Brian Mendelsohn (Director of ADC Process Development and Tech Transfer)

14.7. Eucodis Bioscience

14.7.1. Company Snapshot

14.7.2. Interview Transcript: Jan Modregger (Head of Research and Development)

14.8. NBE-Therapeutics

14.8.1. Company Snapshot

14.8.2. Interview Transcript: Wouter Verhoeven (Former Chief Business Officer)

14.9. Shanghai Miracogen

14.9.1. Company Snapshot

14.9.2. Interview Transcript: Mary Chaohong Hu (Chief Executive Officer)

14.10. Synaffix

14.10.1. Company Snapshot

14.10.2. Interview Transcript: Floris van Delft (Chief Scientific Officer)

## **15. CONCLUDING REMARKS**

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

## **17. APPENDIX 2: LIST OF COMPANIES AND ORGANIZATIONS**

## I would like to order

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