+44 20 8123 2220
info@marketpublishers.com

Non-Viral Transfection Reagents and Systems Market (2nd Edition) - Distribution by Type of Non-Viral Transfection Method (Chemical Methods and Physical Methods), End-User (Academic and Research Institutions, Pharmaceutical Companies and Other End-Users), Application Area (Clinical Applications and Research Applications) and Key Geographical Regions (North America, Europe, Asia-Pacific and Rest of the World): Industry Trends and Global Forecasts, 2023-2035

https://marketpublishers.com/r/N5D3F8263800EN.html
Date: March 2023
Pages: 254
Price: US$ 4,799.00 (Single User License)
ID: N5D3F8263800EN

Abstracts

The global non-viral transfection reagents market is expected to reach USD 633 million in 2023 anticipated to grow at a CAGR of 8.0% during the forecast period 2023-2035.

Nucleic acid-based therapeutic approaches have emerged as a robust modality in targeting genetic instructions for the treatment of various diseases. The demonstrable success of these therapies has led to a notable surge in regulatory approvals, underscoring their therapeutic potential and escalating acceptance within the medical community. Consequently, the imperative for efficient delivery systems, known as vectors, to transport these therapies has become increasingly pronounced.

Traditionally, viral vectors were the cornerstone for producing such therapies. However, despite substantial advancements in research and development, viral vectors present inherent limitations. Challenges encompass immune system responses, potential toxicity concerns, the exorbitant costs associated with their development, and

+44 20 8123 2220
info@marketpublishers.com

constraints related to the quantity of genetic material they can effectively transport in a single instance.

To mitigate these challenges, there has been a paradigm shift towards non-viral gene delivery vehicles for transfection purposes. Non-viral transfection involves the targeted introduction of genetic material into diverse cells using carriers that are not of viral origin. In response to the escalating demand for nucleic acid-based therapies, novel non-viral transfection methods and systems are undergoing development, tailored explicitly to facilitate efficient intracellular delivery in laboratory settings. This surge in demand for non-viral vectors, coupled with the ongoing evolution of reagents and delivery systems, is poised to drive substantial and sustained growth within the market for these transformative technologies in the forecasted period.

Report Coverage

An executive summary of the insights captured during our research. It offers a high-level view on the current state of non-viral transfection reagents and systems market and its likely evolution in the mid-long term.

A general overview of non-viral transfection reagents and systems, highlighting details on transfection and its applications, such as advanced therapy medicinal product development, gene silencing, bioproduction of therapeutic protein and stem cell engineering.

A detailed assessment of the overall market landscape of the companies developing non-viral transfection reagents, based on several relevant parameters, such as type of carrier used, compatible cell type, type of molecule delivered, and serum compatibility.

An in-depth company competitiveness analysis of non-viral transfection reagent and system developers based in North America, Europe and Asia-Pacific. The analysis compares various developers based on supplier strength and product portfolio strength.

A detailed technology competitiveness analysis of electroporation-based transfection systems and other non-viral transfection systems, taking into consideration the supplier strength and product portfolio strength.

Tabulated profiles of key players engaged in the development of non-viral

+44 20 8123 2220
info@marketpublishers.com

transfection reagents and systems (shortlisted based on the type of carrier used, compatible cell type, type of molecule delivered and serum compatibility). Each profile includes a brief overview of the company, financial information (if available), recent developments and an informed future outlook.

An in-depth analysis of over 80 cell (including TCR and CAR-T cell) and gene therapy developers that are likely to partner with non-viral transfection reagent and system developers, based on several relevant parameters, such as pipeline maturity, developer strength, pipeline strength and type of therapy.

A review of the various non-viral focused initiatives undertaken by big pharma players, featuring various insightful representations, based on year of initiative, type of initiative, type of therapy and target therapeutic area.

An in-depth analysis of close to 900 patents that have been filed / granted related to non-viral transfection systems, since 2019, highlighting key trends associated with these patents, across type of patent, publication year, application year, geography, type of applicant, CPC symbols, emerging focus areas, leading players.

An insightful framework to understand the pricing strategy of the non-viral transfection reagents offered by a company, along with its competitive position in the market. In addition, it presents the equation devised to calculate the likely price of non-viral transfection reagents based upon their characteristics.

The likely distribution of the future opportunity across, non-viral transfection systems (chemical method and physical method), end-user (academic and research institutions, pharmaceutical companies and other end-users), application area (clinical application and research application) and geographical regions (North America, Europe, Asia-Pacific and rest of the world).

Key Market Companies

Altogen Biosystems

Bio-Rad Laboratories

BEX

+44 20 8123 2220
info@marketpublishers.com

BTX

Celsion

Genprex

Inovio Pharmaceuticals

MaxCyte

MilliporeSigma

Nepa Gene

OZ Biosciences

Thermo Fisher Scientific

+44 20 8123 2220
info@marketpublishers.com

Contents

1. PREFACE

1.1. Chapter Overview
1.2. Key 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. Introduction to Transfection
3.3. Methods of Transfection
  3.3.1. Viral Transfection Systems
    3.3.1.1. Types of Viral Transfection Vectors
      3.3.1.1.1. Adeno-associated Virus-based Vectors
      3.3.1.1.2. Adenovirus-based Vectors
      3.3.1.1.3. Herpes Virus-based Vectors
      3.3.1.1.4. Lentivirus-based Vectors
      3.3.1.1.5. Retroviral-based Vectors
  3.3.2. Non-Viral Transfection Systems
    3.3.2.1. Chemical-based Transfection
      3.3.2.1.1. Lipoplexes-based Transfection
      3.3.2.1.2. Polyplexes-based Transfection
      3.3.2.1.3. Lipo-polyplexes-based Transfection
      3.3.2.1.4. Dendrimer-based Transfection
      3.3.2.1.5. Cell Penetrating Peptide-based Transfection
    3.3.2.2. Physical Transfection Systems
      3.3.2.2.1. Electroporation-based Transfection
      3.3.2.2.2. Gene Gun-based Transfection
      3.3.2.2.3. Sonoporation-based Transfection
      3.3.2.2.4. Microinjection-based Transfection
      3.3.2.2.5. Magnetofection-based Transfection
3.4. Applications of Transfection

+44 20 8123 2220
info@marketpublishers.com

3.4.1. Advanced Therapeutic Medicinal Product Development
3.4.2. Gene Silencing
3.4.3. Generation of Stable Cell Lines
3.4.4. Large-scale Protein Production
3.4.5. Stem Cell Engineering
3.5. Future Perspectives

4. NON-VIRAL TRANSFECTION REAGENTS: MARKET LANDSCAPE

4.1. Chapter Overview
4.2. List of Non-Viral Transfection Reagents
4.2.1. Analysis by Type of Carrier Used
4.2.2. Analysis by Compatible Cell Type
4.2.3. Analysis by Type of Molecule Delivered
4.2.4. Analysis by Serum Compatibility
4.3 List of Non-Viral Transfection Reagent Developers
4.3.1. Analysis by Year of Establishment
4.3.2. Analysis by Company Size
4.3.3. Analysis by Location of Headquarters (Region-wise)
4.3.4. Analysis by Location of Headquarters (Country-wise)

5. ELECTROPORATION-BASED TRANSFECTION SYSTEMS: MARKET LANDSCAPE

5.1. Chapter Overview
5.2. List of Electroporation-based Transfection Systems
5.2.1. Analysis by Compatible Cell Type
5.2.2. Analysis by Type of Molecule Delivered
5.3. List of Electroporation-based Transfection System Developers
5.3.1. Analysis by Year of Establishment
5.3.2. Analysis by Company Size
5.2.3. Analysis by Location of Headquarters (Region -wise)
5.3.4. Analysis by Location of Headquarters (Country-wise)

6. OTHER NON-VIRAL TRANSFECTION SYSTEMS: MARKET LANDSCAPE

6.1. Chapter Overview
6.2. List of Other Non-Viral Transfection Systems
6.2.1. Analysis by Compatible Cell Type

+44 20 8123 2220
info@marketpublishers.com

6.2.2. Analysis by Type of Molecule Delivered
6.3. List of Other Non-Viral Transfection System Developers
6.3.1. Analysis by Year of Establishment
6.3.2. Analysis by Company Size
6.3.3. Analysis by Location of Headquarters (Region-wise)
6.3.4. Analysis by Location of Headquarters (Country-wise)

7. COMPANY COMPETITIVENESS ANALYSIS

7.1. Chapter Overview
7.2. Methodology and Key Parameters
7.3. Non-Viral Transfection Reagent Developers: Company Competitiveness Analysis
7.3.1. Non-Viral Transfection Reagent Developers based in North America
7.3.2. Non-Viral Transfection Reagent Developers based in Europe
7.3.3. Non-Viral Transfection Reagent Developers based in Asia-Pacific and Rest of the World

8. TECHNOLOGY COMPETITIVENESS ANALYSIS

8.1. Chapter Overview
8.2. Methodology and Key Parameters
8.3. Electroporation-based Transfection Systems: Technology Competitiveness Analysis
8.3.1. Technologies Offered by Players based in North America
8.3.2. Technologies Offered by Players based in Europe
8.3.3. Technologies Offered by Players based in Asia-Pacific and Rest of the World
8.4. Other Non-Viral Transfection Systems: Technology Competitiveness Analysis
8.4.1. Technologies Offered by Players based in North America
8.4.2. Technologies Offered by Players based in Europe
8.4.3. Technologies Offered by Players based in Asia-Pacific and Rest of the World

9. COMPANY PROFILES

9.1. Chapter Overview
9.2. Non-Viral Transfection Reagent Developers
9.2.1. MilliporeSigma
9.2.1.1. Company Overview
9.2.1.2. Financial Information
9.2.1.3. Recent Developments and Future Outlook

+44 20 8123 2220
info@marketpublishers.com

9.2.2. OZ Biosciences
9.2.2.1. Company Overview
9.2.2.2. Recent Developments and Future Outlook
9.2.3. Thermo Fisher Scientific
9.2.3.1. Company Overview
9.2.3.2. Financial Information
9.2.3.3. Recent Development and Future Outlook
9.3. Electroporation-based Transfection System Developers
9.3.1. BEX
9.3.1.1. Company Overview
9.3.1.2. Recent Developments and Future Outlook
9.3.2. Bio-Rad Laboratories
9.3.2.1. Company Overview
9.3.2.2. Financial Information
9.3.2.3. Recent Developments and Future Outlook
9.3.3. BTX (A subsidiary of Harvard Bioscience)
9.3.3.1. Company Overview
9.3.3.2. Recent Developments and Future Outlook
9.3.4. MaxCyte
9.3.4.1. Company Overview
9.3.4.2. Financial Information
9.3.4.3. Recent Developments and Future Outlook
9.3.5. NepaGene
9.3.5.1. Company Overview
6.3.5.2. Recent Developments and Future Outlook
9.4. Other Non-Viral Transfection System Developers
9.4.1. Imunon (Formerly known as Celsion)
9.4.1.1. Company Overview
9.4.1.2. Recent Developments and Future Outlook
9.4.2. Genprex
9.4.2.1. Company Overview
9.4.2.2. Financial Information
9.4.2.3. Recent Developments and Future Outlook
9.4.3. Inovio Pharmaceuticals
9.4.3.1. Company Overview
9.4.3.2. Financial Information
9.4.3.3. Recent Developments and Future Outlook

10. POTENTIAL STRATEGIC PARTNERS

+44 20 8123 2220
info@marketpublishers.com

10.1. Chapter Overview
10.2. Scope and Methodology
10.3. Non-Viral Transfection System Developers: Potential Strategic Partners in North America
  10.3.1. Most Likely Partners
  10.3.2. Likely Partners
  10.3.3. Less Likely Partners
  10.3.4. Least Likely Partners
10.4. Non-Viral Transfection System Developers: Potential Strategic Partners in Europe
  10.4.1. Most Likely Partners
  10.4.2. Likely Partners
  10.4.3. Less Likely Partners
10.5. Non-Viral Transfection System Developers: Potential Strategic Partners in Asia-Pacific and Rest of the World
  10.5.1. Most Likely Partners
  10.5.2. Likely Partners
  10.5.3. Less Likely Partners

11. BIG PHARMA INITIATIVES

11.1. Chapter Overview
11.2. Scope and Methodology
11.3. None-Viral Transfection Reagents and System Developers: Big Pharma Initiatives
  11.3.1. Analysis by Year of Initiative
  11.3.2. Analysis by Number of Initiative
  11.3.3. Analysis by Type of Initiative
  11.3.4. Analysis by Type of Therapy
  11.3.5. Analysis by Target Therapeutic Area

12. PATENT ANALYSIS

12.1. Chapter Overview
12.2. Scope and Methodology
12.3. Non-Viral Transfection Reagents and Systems: Patent Analysis
  12.3.1. Analysis by Publication Year
  12.3.2. Analysis by Application Year
  12.3.3. Analysis by Patent Jurisdiction
  12.3.4. Analysis by Type of Applicant

+44 20 8123 2220
info@marketpublishers.com

12.3.5. Analysis by CPC Sections
12.3.6. Analysis by Emerging Focus Areas (Word Cloud Representation)
12.3.7. Leading Players: Analysis by Number of Patents
12.4. Non-Viral Transfection Reagents and Systems: Patent Benchmarking Analysis
12.4.1. Analysis by Patent Characteristics (CPC Symbols)
12.4.2. Analysis by Geography
12.5. Non-Viral Transfection Reagents and Systems: Patent Valuation Analysis

13. PUBLICATION ANALYSIS

13.1. Chapter Overview
13.2. Scope and Methodology
13.3. Non-Viral Transfection Reagents and Systems: Recent Publications
13.4. Analysis by Year of Publication
13.5. Analysis by Type of Publication
13.6. Analysis by Type of Molecule Delivered
13.7. Analysis by Target Therapeutic Area
13.8. Analysis by Key Focus Areas (Word Cloud Representation)
13.9. Analysis by Prominent Cells and Cell Lines (Word Cloud Representation)
13.1 Leading Publishers: Analysis by Number of Publications
13.11. Prominent Journals: Analysis by Number of Publications
13.12. Prominent Copyright Holders: Analysis by Number of Publications
13.13 Key Funding Institutes: Analysis by Number of Publications

14. ROOTS ANALYSIS PRICING STRATEGY FRAMEWORK

14.1. Chapter Overview
14.2 Roots Analysis Framework
14.2.1. Methodology
14.2.2. Theoretical Framework and Price Evaluation Hypothesis
14.2.3. Results and Interpretation
14.2.3.1. Product Price Evaluation Matrix: Based on Transfection Efficiency
14.2.3.2. Product Price Evaluation Matrix: Based on Compatible Cell Type
14.2.3.3. Product Price Evaluation Matrix: Based on Type of Carrier Used
14.2.3.4. Product Price Evaluation Matrix: Based on Type of Molecule Delivered
14.2.3.5. Product Price Evaluation Matrix: Based on Serum Compatibility
14.3. Concluding Remarks

15. MARKET SIZING AND OPPORTUNITY ANALYSIS

+44 20 8123 2220
info@marketpublishers.com

15.1. Chapter Overview
15.2. Forecast Methodology and Key Assumptions
15.3. Non-Viral Transfection Reagents and Systems Market, 2023-2035
15.4. Non-Viral Transfection Reagents and Systems Market: Analysis by Type of Non-Viral Transfection Method, 2023 and 2035
15.5. Non-Viral Transfection Reagents and Systems Market: Analysis by End-User, 2023 and 2035
15.6. Non-Viral Transfection Reagents and Systems Market: Analysis by Application Area, 2023 and 2035
15.7. Non-Viral Transfection Reagents and Systems Market: Analysis by Key Geographical Regions, 2023 and 2035
15.7.1. Non-Viral Transfection Reagents and Systems Market in North America, 2023-2035
15.7.1.1. Non-Viral Transfection Reagents and Systems Market in North America: Analysis by Type of End-User, 2023-2035
15.7.1.1.1. Non-Viral Transfection Reagents and Systems Market in North America for Pharmaceutical Companies, 2023-2035
15.7.1.1.2. Non-Viral Transfection Reagents and Systems Market in North America for Academic and Research Institutions, 2023-2035
15.7.1.1.3. Non-Viral Transfection Reagents and Systems Market in North America for Other End-Users, 2023-2035
15.7.1.2. Non-Viral Transfection Reagents and Systems Market in North America: Analysis by Application Area, 2023-2035
15.7.1.2.1. Non-Viral Transfection Reagents and Systems Market in North America for Research Applications, 2023-2035
15.7.1.2.2. Non-Viral Transfection Reagents and Systems Market in North America for Clinical Applications, 2023-2035
15.7.2. Non-Viral Transfection Reagents and Systems Market in Europe, 2023-2035
15.7.2.1. Non-Viral Transfection Reagents and Systems Market in Europe: Analysis by Type of End-User, 2023-2035
15.7.2.1.1. Non-Viral Transfection Reagents and Systems Market in Europe for Pharmaceutical Companies, 2023-2035
15.7.2.1.2. Non-Viral Transfection Reagents and Systems Market in Europe for Academic and Research Institutions, 2023-2035
15.7.2.1.3. Non-Viral Transfection Reagents and Systems Market in Europe for Other End-Users, 2023-2035
15.7.2.2. Non-Viral Transfection Reagents and Systems Market in Europe: Analysis by Application Area, 2023-2035

+44 20 8123 2220
info@marketpublishers.com

15.7.2.2.1. Non-Viral Transfection Reagents and Systems Market in Europe for Research Applications, 2023-2035
15.7.2.2.2. Non-Viral Transfection Reagents and Systems Market in Europe for Clinical Applications, 2023-2035
15.7.3. Non-Viral Transfection Reagents and Systems Market in Asia-Pacific, 2023-2035
15.7.3.1. Non-Viral Transfection Reagents and Systems Market in Asia-Pacific: Analysis by Type of End-User, 2023-2035
15.7.3.1.1. Non-Viral Transfection Reagents and Systems Market in Asia-Pacific for Pharmaceutical Companies, 2023-2035
15.7.3.1.2. Non-Viral Transfection Reagents and Systems Market in Asia-Pacific for Academic and Research Institutions, 2023-2035
15.7.3.1.3. Non-Viral Transfection Reagents and Systems Market in Asia-Pacific for Other End-Users, 2023-2035
15.7.3.2. Non-Viral Transfection Reagents and Systems Market in Asia-Pacific: Analysis by Application Area, 2023-2035
15.7.3.2.1. Non-Viral Transfection Reagents and Systems Market in Asia-Pacific for Research Applications, 2023-2035
15.7.3.2.2. Non-Viral Transfection Reagents and Systems Market in Asia-Pacific for Clinical Applications, 2023-2035
15.7.4. Non-Viral Transfection Reagents and Systems Market in Rest of the World, 2023-2035
15.7.4.1. Non-Viral Transfection Reagents and Systems Market in Rest of the World: Analysis by Type of End-User, 2023-2035
15.7.4.1.1. Non-Viral Transfection Reagents and Systems Market in Rest of the World for Pharmaceutical Companies, 2023-2035
15.7.4.1.2. Non-Viral Transfection Reagents and Systems Market in Rest of the World for Academic and Research Institutions, 2023-2035
15.7.4.1.3. Non-Viral Transfection Reagents and Systems Market in Rest of the World for Other End-Users, 2023-2035
15.7.4.2. Non-Viral Transfection Reagents and Systems Market in Rest of the World: Analysis by Application Area, 2023-2035
15.7.4.2.1. Non-Viral Transfection Reagents and Systems Market in Rest of the World for Research Applications, 2023-2035
15.7.4.2.2. Non-Viral Transfection Reagents and Systems Market in Rest of the World for Clinical Applications, 2023-2035

16. EXECUTIVE INSIGHTS

+44 20 8123 2220
info@marketpublishers.com

17. CONCLUSION

18. APPENDIX I: TABULATED DATA

19. APPENDIX II: LIST OF COMPANIES AND ORGANIZATIONS

+44 20 8123 2220
info@marketpublishers.com

I would like to order

Product name: Non-Viral Transfection Reagents and Systems Market (2nd Edition) - Distribution by Type of Non-Viral Transfection Method (Chemical Methods and Physical Methods), End-User (Academic and Research Institutions, Pharmaceutical Companies and Other End-Users), Application Area (Clinical Applications and Research Applications) and Key Geographical Regions (North America, Europe, Asia-Pacific and Rest of the World): Industry Trends and Global Forecasts, 2023-2035

Product link: https://marketpublishers.com/r/N5D3F8263800EN.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

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/N5D3F8263800EN.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

Custumer signature _____

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms

+44 20 8123 2220
info@marketpublishers.com

& 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