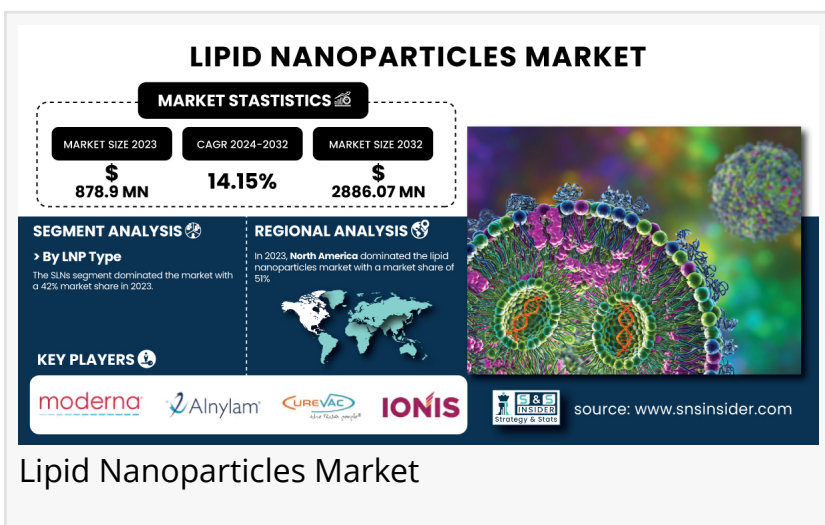


Lipid Nanoparticles Market Projected to Reach USD 2886.07 million by 2032

Growing Demand for Targeted Therapies, RNA-based Treatments, and Advanced Drug Delivery Systems to Propel Lipid Nanoparticles Market at a CAGR of 14.15% by 2032

AUSTIN, TX, UNITED STATES, January 23, 2025 /EINPresswire.com/ --

According to Research by SNS Insider, The global [Lipid Nanoparticles Market](#), valued at USD 878.9 million in 2023, is projected to reach USD 2.89 billion by 2032, growing at a remarkable CAGR of 14.15% during the forecast period of 2024-2032.



The lipid nanoparticles (LNP) market is witnessing strong growth, fueled by advancements in RNA-based therapies, gene therapy, and targeted drug delivery systems. Thus, their stability and efficacy during delivery is crucial and LNPs are at the forefront of this development in the fight against cancer, hereditary disease, and other diseases. LNPs are radically transforming cosmetics product performance, allowing for enhanced skin penetration and controlled release of active compounds for recessed and radioprotective properties. Skin disorders such as psoriasis and dermatitis have also been targeted through the use of antioxidants such as carotenoids and retinoids incorporated into LNP-based formulations. In addition, LNPs are paving unprecedented paths for drug delivery in the form of enhanced bioavailability and organ-selective accumulation. As more research is funded, and innovations in personalized medicine and mRNA therapeutics continue to emerge, the LNP market seems to be in a sustained growth phase.

Get a Free Sample Report of Lipid Nanoparticles Market @ <https://www.snsinsider.com/sample-request/4993>

Key Players in Lipid Nanoparticles Market

- Ionis Pharmaceuticals (Vyondys 53, Waylivra)
- CureVac (CVnCoV, CureVac's mRNA vaccines)

- Alnylam Pharmaceuticals (Onpattro, Givlaari)
- Moderna (mRNA-1273 (Spikevax), mRNA-1010)
- Arcturus Therapeutics (ARCT-810, LUNAR-COV19)
- VivoCapital (VLP-based vaccines, Lipid nanoparticle formulations for RNA delivery)
- Novartis (Kymriah, Leqvio)
- Pfizer (Comirnaty, BNT162b2)
- Bayer (Vitrakvi, Kovaltry)
- Sanofi (mRNA vaccine candidates, Dupixent)
- Sangamo Therapeutics (SB-525, Zinc Finger Nucleases)
- Horizon Therapeutics (Tepezza, Ravicti)
- Genevant Sciences (GENE-012, GENE-001)
- Enzyvant (VY-AADC, VY-GLB1)
- Dicerna Pharmaceuticals (DCR-PHXC, DCR-HBVS)
- Takeda Pharmaceuticals (TAK-999, Velcade)
- Silence Therapeutics (SLN124, SLN360)
- Revelo Genetics (RNA-based diagnostics, RNA-based therapeutics)
- Dynavax Technologies (HEPLISAV-B, CpG 1018)
- Translate Bio (mRNA-based therapies, TB-403)

Segmentation Analysis

By LNP Type

Solid Lipid Nanoparticles (SLNs) dominated the market in 2023, with a 42% market share. SLNs are also considered advantageous for a variety of applications due to their increased stability, controlled release, and capacity for lipophilic and hydrophilic drug delivery. SLNs are still at the forefront of mRNA vaccine production and gene therapy in 2023, their capacity to maintain the integrity of the payload during the delivery process demonstrated further potential for broad implementation in the pharmaceutical industry.

Nanostructured Lipid Carriers (NLCs) became the fastest-growing of the lipid carriers segments throughout the forecast period, as a result of their improved capacity for the incorporation of lipophilic and hydrophilic drugs, which makes this method more versatile for drug delivery applications. NLCs are emerging in tailored medicine and are also under development in clinical trials for novel gene therapies.

By Application

In 2023, the commercial segment dominated the lipid nanoparticles market with a 52% market share, which can be attributed to the increasing commercialization of mRNA vaccines and RNA-based therapeutics. LNPs have considerable support from their scale-up in vaccine (e.g. COVID-19) production and their burgeoning applications in cancer treatment and gene therapy. Although smaller in comparison to the commercial segment, the clinical application segment is the fastest growing and finding its way into gene therapies and RNA products. Leading to the rapid growth of this segment with more of the therapies advancing from research stages to

clinical endeavors, the subsequent use of the vitamins at this point should assist with upscaling market growth over the more extended term.

Need any customization research on Lipid Nanoparticles Market, Enquire Now @ <https://www.snsinsider.com/enquiry/4993>

Lipid Nanoparticles Market Segmentation

by Product

- Ionizable lipids
- PEGylated lipids
- Neutral lipids
- Phospholipids
- Other Formulation Materials

by LNP Type

- Solid lipid Nanoparticles (SLNs)
- Nanostructured lipid Carriers (NLCs)
- Other Types

by Molecule Type

- siRNA
- mRNA
- Other Molecules

by Application

- Commercial
- Clinical

by End User

- Pharmaceutical & Biotechnology Companies
- Academic & Research Institutes
- CDMO's

by Service Type

- Formulation Development Services
- Manufacturing Services
- Other Services

Regional Analysis

North America dominated the lipid nanoparticles market with a 51% market share, attributable to the country's well-established pharmaceuticals and biotechnology infrastructure, high healthcare spending, and access to advanced research and development facilities in 2023. The

region has been a hotspot for LNP development, particularly for RNA therapeutics and gene therapies, and the success of mRNA vaccines has only cemented dominance. Support from regulatory bodies such as the FDA in conjunction with the solid presence of major pharmaceutical companies contributes to North America, in turn, maintaining its market dominance.

Asia-Pacific is the fastest-growing market for lipid nanoparticles throughout the forecast period, driven by rapid development in healthcare infrastructure, increasing biotechnology investments, and rising interest in advanced drug delivery technologies. LNP technologies, bolstered by government funding and a newfound awareness of mRNA-based therapies, are being eyed by countries like China, Japan, and India. It is anticipated that over the next few years, the region will consistently garner the highest compound annual growth rate (CAGR) in the LNP market due to the growing pharmaceutical manufacturing capabilities in the region.

Recent Developments

In February 2024, researchers at the University of Pennsylvania in the U.S. developed an advanced high-throughput screening platform specifically designed for evaluating mRNA encapsulated in lipid nanoparticles. This cutting-edge platform allows for the swift screening of large libraries of LNPs aimed at targeting the brain, accelerating the development of gene editing therapies by streamlining the assessment and optimization of LNPs for brain delivery.

In September 2023, Pfizer and BioNTech received FDA approval for their updated COVID-19 vaccine. The FDA approved their supplemental Biologics License Application for the 2023-2024 version of COMIRNATY, which targets the Omicron XBB.1.5 variant. The vaccine has been fully approved for individuals aged 12 and older, with emergency use authorization extended to children aged 6 months to 11 years.

Buy Full Research Report on Lipid Nanoparticles Market 2024-2032 @ <https://www.snsinsider.com/checkout/4993>

Table of Contents – Major Key Points

1. Introduction
2. Executive Summary
3. Research Methodology
4. Market Dynamics Impact Analysis
5. Statistical Insights and Trends Reporting
6. Competitive Landscape
7. Lipid Nanoparticles Market by Product
8. Lipid Nanoparticles Market by LNP Type
9. Lipid Nanoparticles Market by Molecule Type
10. Lipid Nanoparticles Market by Application
11. Lipid Nanoparticles Market by End User
12. Lipid Nanoparticles Market by Service Type

13. Regional Analysis
14. Company Profiles
15. Use Cases and Best Practices
16. Conclusion

Speak with Our Expert Analyst Today to Gain Deeper Insights @
<https://www.snsinsider.com/request-analyst/4993>

About Us:

SNS Insider is one of the leading market research and consulting agencies that dominates the market research industry globally. Our company's aim is to give clients the knowledge they require in order to function in changing circumstances. In order to give you current, accurate market data, consumer insights, and opinions so that you can make decisions with confidence, we employ a variety of techniques, including surveys, video talks, and focus groups around the world.

Browse More Insights:

[Nanomedicine Market Size, Share & Growth Report](#)
[Drug Delivery Systems Market Size, Share & Growth Report](#)

Akash Anand
SNS Insider Pvt. Ltd
415-230-0044
[email us here](#)

Visit us on social media:

[Facebook](#)

[X](#)

[LinkedIn](#)

[Instagram](#)

This press release can be viewed online at: <https://www.einpresswire.com/article/779637046>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2025 Newsmatics Inc. All Right Reserved.