+44 20 8123 2220
info@marketpublishers.com

Bio Preservation Market - Global Industry Size, Share, Trends, Opportunity, and Forecast, Segmented By Product {Equipment (Freezers, Refrigerators, Consumables), Media (Pre-formulated, Home-brew), LIMS}, By Application {Regenerative Medicine (Cell therapy, Gene therapy, Others), Bio-banking (Human eggs, Human sperms, Veterinary IVF), Drug Discovery}, By Region and Competition, 2019-2029F

https://marketpublishers.com/r/BE260CC004ABEN.html
Date: June 2024
Pages: 182
Price: US$ 4,900.00 (Single User License)
ID: BE260CC004ABEN

Abstracts

Global Bi%ll%Preservation Market was valued at USD 1.87 Billion in 2023 and is anticipated t%ll%project steady growth in the forecast period with a CAGR of 9.12% through 2029. Bi%ll%preservation utilizes microorganisms and their metabolic by-products t%ll%enhance food safety and prolong shelf life. It effectively extends the viability of biospecimens and safeguards them from environmental damage. Biospecimens, such as urine, tissue, blood, DNA, cells, and more, are stored in a bi%ll%repository for future research or laboratory testing purposes. There are tw%ll%primary types of bi%ll%preservation: bio-preservation media and bio-preservation equipment. The latter comprises tools that preserve biospecimens including bio-based therapeutics, cells, clinical biomarkers, diagnostic biochips, viruses, and others. Notably, bio-preservation equipment is commonly employed in processing various biospecimens like human tissue samples, stem cells, organs, and more. The market growth of bi%ll%preservation is driven by several factors, including the improvement of healthcare expenditure, the implementation of in-house sample storage in laboratories and hospitals, and increased investment in research and development (R&D). Bi%ll%preservation plays a critical role in advancing regenerative medicine, and the rising demand for tissue and cell preservation has prompted increased investment in

bi%ll%preservation-based pharmaceutical businesses.

Key Market Drivers

Increasing Investments in Research and Developments

The growth of the biopharmaceutical industry is a significant driver impacting the market. This sector specializes in the development and manufacturing of biological drugs, encompassing therapeutic proteins, antibodies, vaccines, and cell-based therapies. Bi%ll%preservation plays a crucial role in safeguarding the stability, quality, and integrity of these intricate biological products throughout their life cycle, spanning from development t%ll%distribution. Given the sensitivity of biological drugs t%ll%environmental conditions, including temperature, light, and moisture, there has been a substantial surge in the demand for preservation techniques that are indispensable for upholding the stability and quality of these drugs during storage and transportation. By employing cryopreservation, lyophilization, or other suitable preservation methods, biopharmaceutical companies can prolong the shelf life of their products, ensuring their efficacy and safety upon administration t%ll%patients. Significant investments have been made by both private and public organizations in research and development endeavors related t%ll%the development of new medications, which hold the potential t%ll%combat the rising number of chronic diseases. The substantial increase in funding aims t%ll%enhance access t%ll%advanced medical care and cutting-edge products, including state-of-the-art bi%ll%preservation facilities. The expanding number of biobanks, particularly those dedicated t%ll%biospecimen storage, presents promising opportunities for the bi%ll%preservation market. Governments worldwide are implementing various measures t%ll%promote cell therapies for the treatment of diverse diseases. Government healthcare initiatives encompass grants, contracts, and financial support for research activities, leading t%ll%a surge in research and development expenditures by organizations.

Advances In Bi%ll%banking

The rising demand for biobanking has a significant impact on the global market. Biobanks serve as repositories for various biological samples, including cells, tissues, blood, DNA, and other biomaterials, used for research and diagnostic purposes. These techniques play a crucial role in preserving the integrity, viability, and functionality of these samples, ensuring their long-term storage and usability. The increasing need for large-scale population-based studies, clinical trials, and research projects that require

+44 20 8123 2220
info@marketpublishers.com

access t%ll%diverse and well-preserved biological samples is influencing the biobanks segment worldwide. The growing focus on precision medicine and personalized healthcare has underscored the importance of biobanks, as they provide a comprehensive collection of samples for genomic testing, biomarker discovery, and the development of tailored treatments. Advances in bio-preservation techniques ensure the long-term stability and integrity of biological samples. Researchers rely on preserved samples for longitudinal studies and retrospective analyses, driving the demand for methods that maintain sample quality over time. Biobanks play a crucial role in medical and scientific research. The use of well-preserved samples enhances research quality and reproducibility, making advanced bio-preservation methods a necessity. Biobanks support a wide range of biomedical research, including biomarker discovery, drug development, and disease mechanisms. Effective bio-preservation ensures that samples remain viable for a multitude of research applications.

Growing Demand for Personalized Medicine

The increasing demand for personalized medicine is driving the growth of the bi%ll%preservation market. The significant unmet medical need for developing effective therapies for various diseases and conditions has fueled the demand for personalized medicine, consequently driving the need for bi%ll%preservation. Market players may find themselves in a strategically advantageous position in this scenario. Personalized medicine, which considers individual needs and preferences, is gaining momentum as individuals increasingly store their tissues and stem cells for potential future treatments. The availability of individual samples, accompanied by annotated clinical and pathological data, is a crucial requirement in personalized medicine. Research organizations are actively exploring the potential of developing personalized treatments using bi%ll%samples. Biobanking, a form of bi%ll%preservation, plays a vital role in personalized medicine and genomics research. As a result, the growing demand for personalized medicine will fuel the worldwide demand for bi%ll%preservation and drive market growth.

Rising Investments in Research of Regenerative Medicine

Advancements in regenerative medicine exert a significant influence on the global market. Bi%ll%preservation plays a pivotal role in the success of regenerative medicine by safeguarding the viability and functionality of cells, tissues, and engineered constructs. The objective of regenerative medicine is t%ll%restore or replace damaged tissues or organs through cell-based therapies, tissue engineering, and innovative approaches. These techniques are vital for maintaining the viability and potency of stem

cells during storage and transportation. Cryopreservation methods, such as freezing and vitrification, are commonly employed t%ll%preserve stem cells for future therapeutic or research purposes. Progress in stem cell preservation protocols and cryoprotectants has improved the viability and post-thaw functionality of stem cells, thereby contributing t%ll%market growth.

Key Market Challenges

Ethical Issues

Ethical concerns pose significant challenges in the bi%ll%preservation market. The issue of privacy when accessing biological samples remains a prominent ethical concern, as safeguarding the identity of individuals is of utmost importance. Obtaining informed consent serves as the initial step towards ensuring protection. Private companies operating in this market may attempt t%ll%exploit biobank information for their own interests. Ethical deliberations regarding the preservation of biological samples have been subject t%ll%ongoing discussions for numerous years. Research conducted in the field of biological specimens, such as tissues and stem cells, als%ll%faces scrutiny in several countries. Noteworthy ethical issues encompass the cloning of embryonic stem cells and the destruction of embryos in order t%ll%establish cell lines. The safety concerns, scientific integrity, and acceptance of using Human Embry%ll%Stem Cell Lines in research remain topics of debate. These factors may impede the growth of the global bi%ll%preservation market during the forecast period.

High Costs of Bi%ll%preservation Activities

Bi%ll%preservation is an advanced preservation technology that involves significant expenses due t%ll%the utilization of costly processes and equipment throughout the preservation process. Stability concerns arise from tissue damage during freezing and thawing. The introduction of low-cost preservation procedures, such as room temperature preservation processes, is anticipated t%ll%impede market growth.

Key Market Trends

Emergence Of Stem Cell Storage in Biobanks

The bi%ll%preservation market is experiencing a significant trend with the emergence of stem cell storage in biobanks. The demand for stem cell storage in biobanks is witnessing remarkable growth, positively impacting the global bi%ll%preservation

+44 20 8123 2220
info@marketpublishers.com

market's expansion in the forecast period. In disciplines like cardiology and oncology, scientists recognize the potential of stem cells t%ll%address unmet needs. Consequently, the market is witnessing the establishment of numerous biobanking facilities dedicated t%ll%stem cell research. Research organizations are actively focused on establishing advanced production or manufacturing units t%ll%enhance supply chain efficiency, thereby increasing production capacities. For instance, the adoption of IT in logistics facilitates the monitoring of biobanking services, while the development of temperature-controlled logistics solutions, such as cryopreservation, minimizes manual errors and enables the production of large batches of stem cell therapy products in a closed, sterile environment. These factors present substantial growth opportunities for the global bi%ll%preservation market in the forecast period.

Increasing Drug Discovery Applications

Drug discovery applications is als%ll%playing a significant role in positively influencing the market and driving the demand for these technologies and solutions. Given that drug discovery heavily relies on the utilization of cell lines and primary cells for screening, testing, and studying the effectiveness and safety of potential drug candidates, the importance of these technologies and equipment cannot be overstated. They are crucial for storing and maintaining the viability of cell-based assays and tissue samples used in high-throughput screening (HTS). The accurate and efficient preservation and retrieval of these samples are paramount for conducting large-scale screening campaigns, thus expediting the drug discovery process.

Segmental Insights

Product Insights

Based on Product, Media have emerged as the fastest growing segment in the Global Bi%ll%Preservation Market in 2023. The substantial share of this segment can be attributed t%ll%the increasing research activities in stem cell therapy, regenerative medicine, and personalized medicine. Bi%ll%preservation media plays a vital role in stem cell therapy and the preservation of transplanted organs. Nutrient media are extensively utilized in tissue engineering, particularly in stem cell storage. Ensuring a continuous supply of oxygen and nutrition diffusion is crucial during the initial stages of stem cell culture. Stem cell engineering has long been employed in the treatment of bone defects.

Application Insights

+44 20 8123 2220
info@marketpublishers.com

Based on Application, Regenerative Medicine have emerged as the dominating segment in the Global Bi%ll%Preservation Market in 2023. The advancements in the fields of regenerative medicine and personalized medicine, along with the growing trend in cord blood banking, are all contributing t%ll%the development of this segment. The significant share of this segment can be attributed t%ll%the high prevalence of chronic diseases globally, as well as the advancements in treatment methods. Regenerative Medicine emerged as the dominant segment in the Global Bi%ll%Preservation Market due t%ll%several key factors driving its growth and adoption. One significant factor is the increasing prevalence of chronic diseases and age-related disorders, which has propelled the demand for regenerative therapies aimed at repairing or replacing damaged tissues and organs. The rising geriatric population worldwide, coupled with the escalating burden of chronic conditions such as cardiovascular diseases, diabetes, and neurological disorders, has fueled the need for innovative regenerative solutions.

Regional Insights

Based on Region, North America have emerged as the dominating region in the Global Bi%ll%Preservation Market in 2023. Key drivers of this market's growth include increased research activities in regenerative medicine, rising R&D investments in life sciences research, and growing awareness of personalized medicine. These factors are propelled by the constant discovery of new drugs and the introduction of advanced therapies in the biomedical research sector. The demand for high-quality care for patients with chronic diseases, coupled with the continuous discovery of new drugs and the emergence of advanced therapies, further contribute t%ll%the development of this industry. In North America, the demand for blood, solid tissue specimens (including paraffin-embedded or frozen bio-specimens of tumors), and other tissues (such as peripheral blood cells, bone marrow, and stem cells-derived cord blood and its derivatives) is driven by various research institutes, pathological centers, and hospitals. This growth is supported by favorable government regulations. Asia Pacific is projected t%ll%witness the fastest growth in the bi%ll%preservation media and equipment industry. This can be attributed t%ll%increasing public and private investments in life sciences research, the rising number of biobanks and research centers, and the high prevalence of chronic diseases in the region.

Key Market Players

BioCision LLC

+44 20 8123 2220
info@marketpublishers.com

BioLife Solutions Inc.

ThermoGenesis Holdings, Inc.

Custom Biogenic Systems Inc.

Lifeline Scientific Inc.

Merck KGaA

Princeton CryoTech Inc.

VWR International, LLC

Azenta US Inc.

Koninklijke DSM N.V.

Report Scope:

In this report, the Global Bi%ll%Preservation Market has been segmented int%ll%the following categories, in addition t%ll%the industry trends which have als%ll%been detailed below:

Bi%ll%Preservation Market, By Product:

%ll%Equipment

%ll%Freezers

%ll%Refrigerators

%ll%Consumables

%ll%Media

%ll%Pre-formulated

+44 20 8123 2220
info@marketpublishers.com

%ll%Home-brew

%ll%LIMS

Bi%ll%Preservation Market, By Application:

%ll%Regenerative Medicine

%ll%Cell therapy

%ll%Gene therapy

%ll%Others

%ll%Bio-banking

%ll%Human eggs

%ll%Human sperms

%ll%Veterinary IVF

%ll%Drug Discovery

Bi%ll%Preservation Market, By Region:

%ll%North America

%ll%United States

%ll%Canada

%ll%Mexico

%ll%Europe

+44 20 8123 2220
info@marketpublishers.com

%ll%France

%ll%United Kingdom

%ll%Italy

%ll%Germany

%ll%Spain

%ll%Asia Pacific

%ll%China

%ll%India

%ll%Japan

%ll%Australia

%ll%South Korea

%ll%South America

%ll%Brazil

%ll%Argentina

%ll%Colombia

%ll%Middle East & Africa

%ll%South Africa

%ll%Saudi Arabia

%ll%UAE

Competitive Landscape

+44 20 8123 2220
info@marketpublishers.com

Company Profiles: Detailed analysis of the major companies present in the Global Bi%ll%Preservation Market.

Available Customizations:

Global Bi%ll%Preservation Market report with the given market data, TechSci Research offers customizations according t%ll%a company's specific needs. The following customization options are available for the report:

Company Information

Detailed analysis and profiling of additional market players (up t%ll%five).

+44 20 8123 2220
info@marketpublishers.com

Contents

+44 20 8123 2220
info@marketpublishers.com

6. NORTH AMERICA BIO PRESERVATION MARKET OUTLOOK

7. EUROPE BIO PRESERVATION MARKET OUTLOOK

+44 20 8123 2220
info@marketpublishers.com

8. ASIA PACIFIC BIO PRESERVATION MARKET OUTLOOK

+44 20 8123 2220
info@marketpublishers.com

9. SOUTH AMERICA BIO PRESERVATION MARKET OUTLOOK

+44 20 8123 2220
info@marketpublishers.com

10. MIDDLE EAST AND AFRICA BIO PRESERVATION MARKET OUTLOOK

+44 20 8123 2220
info@marketpublishers.com

+44 20 8123 2220
info@marketpublishers.com

+44 20 8123 2220
info@marketpublishers.com

I would like to order

Product name: Bio Preservation Market - Global Industry Size, Share, Trends, Opportunity, and Forecast, Segmented By Product {Equipment (Freezers, Refrigerators, Consumables), Media (Pre-formulated, Home-brew), LIMS}, By Application {Regenerative Medicine (Cell therapy, Gene therapy, Others), Bio-banking (Human eggs, Human sperms, Veterinary IVF), Drug Discovery}, By Region and Competition, 2019-2029F

Product link: https://marketpublishers.com/r/BE260CC004ABEN.html

Price: US$ 4,900.00 (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/BE260CC004ABEN.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 & Conditions at https://marketpublishers.com/docs/terms.html

+44 20 8123 2220
info@marketpublishers.com

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