

# **U.S. Biobanks Market Size, Share & Trends Analysis Report By Product & Service, By Biospecimen (Human Tissues, Organs, Stem Cells), By Type (Physical/Real Biobanks, Virtual Biobanks), By Application, By Region, And Segment Forecasts, 2025 - 2030**

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## **Abstracts**

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### **U.S. Biobanks Market Growth & Trends**

The U.S. biobanks market size is anticipated to reach USD 24.48 billion by 2030 and is projected to grow at a CAGR of 6.26% from 2025 to 2030, according to a new report by Grand View Research, Inc. This growth is attributed to rising demand for quality biospecimens in drug development, personalized medicine, and clinical research. Advancements in biobanking technologies, growing investments from pharmaceutical and biotech firms, and expanding applications in genomics and regenerative medicine further drive market expansion.

The increasing emphasis on precision medicine significantly boosts the demand for quality, well-annotated biospecimens across the U.S. healthcare and research landscape. These samples are essential for supporting critical activities such as biomarker discovery, patient stratification, and the development of targeted therapies. Biobanks play a pivotal role in this process by offering reliable access to diverse and clinically relevant biological materials, vital for translational research and drug development. As pharmaceutical companies, research institutions, and diagnostics firms prioritize personalized treatment approaches, the reliance on biobank

infrastructure is expected to grow substantially. This trend is poised to drive sustained market demand over the forecast period.

The COVID-19 pandemic significantly accelerated the demand for biobanks in the U.S., driven by the urgent need for biological specimens to support vaccine development, diagnostic innovation, and public health research. Biobanks played a vital role in collecting, preserving, and distributing COVID-19-related samples, enabling faster response to emerging variants and enhancing understanding of disease progression. Their contribution helped accelerate clinical trials, support regulatory approvals, and advance therapeutic and preventive strategies during the pandemic.

However, the U.S. market faces constraints due to high infrastructure and maintenance costs, along with stringent regulatory requirements related to data privacy, informed consent, and sample traceability. These challenges can limit scalability, particularly for smaller institutions and emerging players.

### U.S. Biobanks Market Report Highlights

The services held the largest market share in 2024 and are anticipated to grow at the fastest CAGR over the forecast period. This is attributed to increasing demand for end-to-end sample management, processing, and storage solutions, especially from the pharma and research sectors. The product segment is expected to grow significantly over the forecast period.

The human tissues segment dominated with a market share of 36.91% in 2024. This is driven by their critical role in disease research, biomarker discovery, and drug development, particularly in oncology and regenerative medicine. However, stem cells are anticipated to grow at the fastest CAGR of 7.40% over the forecast period.

The physical/real biobank held the largest market share in 2024. This is driven by their established infrastructure, ability to store diverse biospecimens under controlled conditions, and widespread use in clinical trials and translational research. However, virtual biobank types are anticipated to grow at the fastest CAGR over the forecast period.

The therapeutics segment dominated the application segment with the largest share in 2024 and is anticipated to grow at the fastest CAGR over the forecast period. This is driven by the increasing use of biobanked samples in developing

targeted treatments, regenerative therapies, and personalized medicine approaches. However, clinical diagnostics are expected to grow significantly over the forecast period.

### **Companies Mentioned**

Thermo Fisher Scientific, Inc.  
Merck KGaA  
QIAGEN  
Hamilton Company  
Tecan Trading Ag  
ViaCord (Revitty)  
Cryo-Cell  
BioCision, LLC.  
Icibiomedical  
Charles River Laboratories  
Azenta US Inc.  
Stemcell Technologies  
Biovault Family  
LabVantage Solutions Inc.  
Precision Cellular Storage Ltd.

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